## Meaningfulness in Kids' Eyes:

## Validation of the Child Flourishing Scale in a Hong Kong Chinese Population

Alfred Pak-Kwan Lo<sup>1</sup>, Hung Kit Fok<sup>2</sup>, and Theodore Ching-Kong Cheung<sup>3</sup>

<sup>1</sup> Department of Psychiatry, The University of Melbourne, Parkville, Victoria, Australia

<sup>2</sup> Department of Psychology, The Chinese University of Hong Kong, Hong Kong SAR, China

<sup>3</sup> Department of Psychiatry, The Hospital for Sick Children, Toronto, Canada

#### **Author Note**

We have no conflicts of interest to disclose.

A.P.K.L. was supported by the Melbourne Research Scholarship. T.C.K.C. was supported by the SickKids' Garry Hurvitz Fellowship.

We thank Myra Chiu, Yeung Yi, and Erica Wong for their help in participant recruitment and data collection. We also thank the schools, children and families participating in this study.

Correspondence concerning this article should be addressed to Theodore Ching-Kong Cheung, PhD, Department of Psychiatry, The Hospital for Sick Children, 555 University Ave, Toronto, ON, M5G 1X8, Canada. Email: teddy.cheung@sickkids.ca

#### Abstract

From uplifting positive experiences to balancing between both positive and negative ones, conceptualization of mental well-being has gone through several paradigm shifts in recent decades. One long lasting discussion falls on the importance of eudaimonia in contrast to the hedonia. Majority of models were developed from an adult framework, while research in the development of flourishing in children receives relatively limited attention. The current study addresses this issue by validating a flourishing scale for children from grades 3 to 6 in Hong Kong, with the aim to provide a solid tool to facilitate more research on the topic. A total of 5,838 children participated in the study. The scale had satisfactory internal consistency and convergent validity. In a confirmatory factor analysis together with items related to positive feeling, a two-factor model outperforms a single-factor model, suggesting that children could readily differentiate the two constructs. In addition, both flourishing and positive feeling independently predicted anxiety even controlling for each other. Taken together, this study offers a reliable and valid tool for measuring flourishing in children.

Keywords: children, assessment, well-being, positive psychology

## Meaningfulness in Kids' Eyes:

## Validation of the Child Flourishing Scale in a Hong Kong Chinese Population

Since the taking off of positive psychology in the 1990s, numerous research has been done on positive mental well-being. A major quest in these studies, and probably so for every maturely developed mind as well, is to clarify what positive mental well-being is. Intuitively, having more pleasant than unpleasant emotions is vital for mental health (Halle, 2003). However, Wong (2021) sharply pointed out that a flourishing life is attainable amid unpleasantness bringing a paradigm shift toward well-being's research. In his theory of existential positive psychology, human's potential of representing themselves as a being with faith, hope, and love leads to a sense of meaningfulness (Wong, 2023a), integrating the random miseries from the nature to a coherent life story (Wong, 2017). Nonetheless, this theory is built almost exclusively upon mature humans (i.e., adults). It remains inconclusive whether the structure of mental wellbeing in children is similar to that in adults. Inspired by Wong's works, the current study addresses this issue by validating a psychometric instrument for flourishing in young children. We hope that this addition to the literature can help bridge the many great ideas on existential positive psychology into child psychology.

Mental well-being, according to the operational definition by Huppert and So (2013), involves two types of experiences, positive feeling and flourishing. Positive feeling, or hedonia, describes a sense of pleasantness (Diener et al., 1999; Ryff & Keyes, 1995). Flourishing, or eudaimonia, goes beyond whether one feels good at the moment, but about personal development, sense of purpose, and fulfilment toward life (Mesurado et al., 2021). Although highly correlated with each other (Diener et al., 2010), positive feeling and flourishing have substantial differences. First, in Huppert and So (2013), they found that positive feeling is distinct from flourishing in a factor analysis. Moreover, positive feeling and flourishing have different, or even reverse, patterns with multiple predictors (Baumeister et al., 2013). For instance, when controlling for the other in a correlation analysis, a higher level of stress is associated with lower positive feeling but higher flourishing. In fact, it is not difficult to imagine a scenario where a person found their life fulfilling even though they are seriously ill (Wong et al., 2022). Essentially, positive feeling is an emotional state that can change quickly depending on the context. A boy losing in an athletic competition is certainly a bad-feeling experience. Yet, the boy could find the competition fulfilling, if he treats this failure as a learning experience for future competition. Flourishing, which does not only focus on the present, but also integrates from the past and projects onto the future, entails a positive self-image that is different from the immediate present (Baumeister et al., 2013). A worth-living life with suffering is thus possible (Wong, 2022).

While some suggest that young children need to learn how to overcome adversity (Holliman & Sheehy, 2023) and develop positive mental health (Wong, 2019; Wong & Wong, 2012), an emerging view proposes that flourishing should be one of the aims in education (Kristjánsson, 2017; Wolbert et al., 2021). However, are children capable of understanding flourishing? Arguably, unlike adults, flourishing may be understood in the same way as simply positive feeling for children. Developmentally, children may not be ready to understand what qualifies for a meaningful life. Meaning-making requires coherent integration of personal experience (Rogers et al., 2023), which typically emerges in late adolescence (Habermas & Bluck, 2000). Young children may not be able to construct meaning from their life stories and form an understanding toward their self (i.e., identity). Hence, although flourishing is certainly relevant to the well-being of maturely developed minds, it is plausible that the children do not

find it different from simply pleasantness. Indeed, when both children and adolescents defined what happiness meant to them in their own terms, hedonic aspects (e.g., positive feelings) are dominant in children, while eudemonic aspects (e.g., interpersonal relationships, harmony) are dominant in adolescents (López-Pérez et al., 2016). The current study hence aims to investigate whether children understand flourishing as a distinct entity from positive feeling.

Few quantitative measures have been developed for assessing flourishing in children. Most of the research on child's flourishing used three parent-reported items (e.g., in National Survey of Children's Health), which covered merely the parents' perception toward child's behavior (i.e., curiosity about learning, self-regulation, and emotional stability) and did not address adequately the subjective experience of the child (Barnhart et al., 2022; Kwong & Hayes, 2017). A problem with relying on parents' reports is that parents could be biased by their own emotional state when evaluating the child's one. Indeed, parents' reports on their children's general happiness did not correlate with their children's self-reports but their self-reported happiness (López-Pérez & Wilson, 2015). Some directly adopted items from adult scales without a comprehensive analysis of the construct validity and the factor structure (e.g., Bravo-Sanzana et al., 2022). Two recent works, namely, the Stirling Children's Well-being Scale (Liddle & Carter, 2015) and the Psychological Well-Being Scale for Children (Opree et al., 2018), assess children's well-being more comprehensively, but both were developed and tested in a European context. Also, two subscales of the Psychological Well-Being Scale for Children (autonomy and positive relations with others) suffered from a low internal consistency (Opree et al., 2018), whereas there was no explicit evidence of factor structure for the Stirling Children's Well-being Scale (Liddle & Carter, 2015), making translating the scales and validating them in Chinese samples inappropriate. In the Chinese context, one flourishing scale was translated and tested in

adults (Tang et al., 2016; Tong & Wang, 2017) and adolescents aged between 12 and 17 (Duan & Xie, 2019) but not in younger children. Wong (2017) proposed that a promising psychological theory of meaning in life must be relevant to people in all parts of the world, not just the West. Therefore, the current work tries to bridge the research gap by looking into the flourishing in young children among a Hong Kong Chinese sample.

The current study aims to develop a scale to assess state flourishing of children in a Hong Kong Chinese population. The flourishing scale developed by Huppert and So (2013) was translated into Chinese and adapted to young children's language. Then we examined the psychometric properties of the scale, including reliability, validity, and factor structure. Considering that negative and positive experiences are both important aspects of life (Wong, 2011), we hypothesized that mental well-being is not just a lack of mental illness (Keyes, 2007). Hence, we expected that flourishing would only show weak, if not nil, correlation with anxiety. Second, we tested whether flourishing and positive feeling load on the same or different latent factor structures. If young children have not yet developed a sense of meaning in life, a parsimonious one-factor model would be sufficient. However, if they respond differently between flourishing and positive feeling in predicting anxiety would also been tested. Lastly, as a representative sample, we explored whether demographical individual differences (i.e., sex and age) matter for self-reported flourishing level.

#### Method

#### **Participants**

Participants were recruited from local primary schools in Hong Kong SAR. Specifically, students of primary 3 to 6 (which are equivalent to grades 3 to 6 in North America) were

targeted. Participants were invited to participate in the study, and completed the relevant assessment measures in a paper-and-pen format in their classrooms, after informed consents were obtained from their parents. We obtained data from 5,838 students. Participants who failed to complete all questions in the flourishing scale, showed a response set in answering, and have elevated scores in the unusual items in the anxiety scale used, were excluded from analyses. The total sample after exclusion had 5,023 participants. Their age ranged from 7 to 16 (M = 9.43, SD = 1.11). Among the participants, 2,434 were female (48.5%). Retrospective ethics approval was obtained from the ethics review board of The Education University of Hong Kong.

#### Materials

## **Child Flourishing Scale**

The flourishing scale developed by Huppert and So (2013) was adapted to the child flourishing scale (CFS) used in this study. This 11-item scale was rated on a 5-point Likert scale for the degree of agreeableness on the items (from 1 = Strongly disagree to 5 = Strongly agree). In their study, they included a "positive emotion" item in the final version of the scale through a data-driven approach. However, for the purpose of the current study, we only included the items related to eudaemonic components in our scale, in line with the recent formulations toward flourishing (Diener et al., 2010; Opree et al., 2018; Wong et al., 2022). These items tap into key aspects of flourishing (Wong, 2023b), including self-esteem, optimism, vitality, emotional stability, resilience, meaning, competence, interpersonal relationships, and engagement. A total score of flourishing was obtained by summing all items. Test-retest reliability was satisfactory based on a small pilot sample (n = 40, r = .72, p = .01). In the adapted version agreed by the authors and stakeholders including social workers and child workers, abstract words, ambiguity, and negations were avoided to accommodate with the language ability of young children and prevent misunderstanding based on the feedback of our pilot testing. A traditional Chinese version of the scale was translated and back-translated by independent individuals with background in psychology and experience in working in school-aged children (see Appendix for the Chinese translated scale presented to the children).

#### **Positive Feeling**

Two standard items were used to assess participants' positive feeling. The first one asks about overall life satisfaction ("All things considered, how satisfied I am with my life as a whole?"; Huppert & So, 2013). The second one asks about general feeling ("Taking all things together, how happy would I say I am?"), the "positive emotion" item from Huppert and So (2013)'s scale. Participants responded to the items on an 11-point Likert scale (from 0 = Extremely unsatisfied / unhappy to 10 = Extremely satisfied / happy).

#### Anxiety

Spence Children's Anxiety Scale (SCAS) is a 44-item self-report measure of children's anxiety (Spence, 1998). The scale consists of 38 items assessing six specific anxiety symptoms, including separation anxiety, social phobia, obsessive-compulsive disorder, panic attack, physical injury fear and generalized anxiety. A total score of anxiety was obtained by summing all 38 items. The remaining 6 items are fillers. The scale was rated on a 4-point Likert scale for the occurrence frequency of each symptom (from 1 = Never to 4 = Always). The scale has received strong support for its internal consistency, test-retest reliability, and construct validity in different cultures including Chinese communities (Li et al., 2011; Spence et al., 2003). A traditional Chinese version of the scale was adopted for the current study by translation and back translation. Good internal consistency was found in the current sample (Cronbach's  $\alpha$  = .92). **Statistical Analysis** 

Psychometric properties of the scale were first examined, including reliability, validity, and factor structure. Factor structure was explored with exploratory factor analysis (EFA) and then verified with confirmatory factor analysis (CFA). The dataset was randomly split into two subsamples of equal sample size for EFA and CFA separately. Fitness of the model was evaluated by indices as suggested by Hu and Bentler (1999). First, chi-square goodness-of-fit statistic was examined. A non-significance of the test indicates good fit. Next, three global fitness indices, including Root-Mean-Square Error of Approximation (RMSEA), Standardized Root-Mean-Square Residual (SRMR), and Comparative Fit Index (CFI), were examined, with RMSEA < .06, SRMR < .08, and CFI > .95 suggesting satisfactory model fit. To examine the relationship between flourishing and positive feeling, the CFA was performed again by including the two items for positive feeling in the analysis with the split-half sample. Model comparison was performed between a one-factor solution and a two-factor solution based on Chi-square different test, Akaike information criterion (AIC) and Bayesian information criterion (BIC). A significant result in Chi-square difference test indicates the more complex model (i.e., two-factor model) fits the data better. Lower values in AIC and BIC indicate better model fit. Multiple regression was utilized to examine whether flourishing and positive feeling have unique effects in predicting anxiety. Descriptive statistics of the scale were then provided by subgroups. Differences of flourishing in sex and age were explored. CFA was carried out by *lavaan* package of R (Rosseel, 2012). Other analyses were performed with SPSS 22.0.

#### Results

#### **Reliability and Validity**

Cronbach's alpha was used to evaluate the internal consistency of the 11 items in CFS. The CFS total score demonstrated very good internal consistency ( $\alpha = .87$ ). Corrected item-total correlations ranged from .48 to .65. The relationship between flourishing and anxiety was tested. A weak negative relationship was found between the average score of CFS and the average score of SCAS (r = -.22, p < .01). It suggests that flourishing is a related but distinct construct from anxiety. All sub-scale scores of SCAS were negatively correlated with CFS (ps < .01).

## **Factor Structure**

Principal component analysis was used for EFA with the first half of the sample. The first three eigenvalues were 4.68, 0.89, and 0.76. A one-factor solution was obtained based on an examination of the scree plot and factor loadings. Table 1 demonstrates the component matrix. The solution accounted for a substantial proportion of the variance in the scale (42.6%). The extracted solution was verified with another half of the sample through CFA. The one-factor model of the 11-item CFS demonstrated satisfactory fitness (RMSEA = .05, SRMR = .02, CFI = .98), except the chi-square goodness-of-fit statistic (i.e.,  $\chi^2(44) = 269.48$ ). The chi-square goodness-of-fit statistic, however, was found to be oversensitive to sample size such that hypothesis testing is nearly always rejected with a large sample size (Hooper et al., 2008).

## Please insert Table 1 here

#### **Flourishing and Positive Feeling**

To examine whether children can differentiate between flourishing from positive feeling, the CFA was performed again with the split-half sample by additionally including positive feeling items. Two of the fitness indices are unsatisfactory, suggesting poor fit in this model (RMSEA = .07, SRMR = .03, CFI = .94,  $\chi^2(65) = 853.84$ ). Fitting the CFA with a two-factor solution (see Figure 1 for the model with loadings) resulted in satisfactory results in the fitness indices (RMSEA = .04, SRMR = .02, CFI = .98,  $\chi^2(64) = 351.15$ ). As expected, a high correlation was found between the two factors, flourishing and positive feeling (r = .81, p < .01). A model comparison found that the two-factor model was better than the one-factor one ( $\chi^2_{diff}$  = 502.69, p < .001). The two-factor model also had lower Akaike information criterion (AIC) and Bayesian information criterion (BIC), again suggesting it is better than the one-factor model (Two-factor model: AIC = 93301, BIC = 93458; One-factor model: AIC = 93802, BIC = 93953).

## Please insert Figure 1 here

To examine whether flourishing and positive feeling have their unique effects, a multiple regression model was performed using the whole sample. Flourishing and positive feeling were both added into the model to predict anxiety. Both predictors were significant (Flourishing:  $\beta = -.13$ , p < .01; Positive feeling:  $\beta = -.15$ , p < .01). Lower flourishing and lower positive feeling both independently predicted higher anxiety.

#### **Child's Flourishing Level**

The mean CFS total score for the sample was 40.95 (SD = 7.81, range = 11–55). Table 2 summarizes the CFS scores by age and sex. To our knowledge, this is the first data documenting flourishing level of children in Hong Kong with such a representative sample size, so we explored if demographical individual differences matter to the flourishing level. In a multiple regression model (F = 58.10, p < .01,  $R^2 = .02$ ), flourishing was found to be significantly predicted by age ( $\beta = -.08$ , p < .01) and sex ( $\beta = -.12$ , p < .01). Female students had higher flourishing level than the male ones. The younger ones also showed higher flourishing level than the older ones. Notably, the effects, though being statistical significant, have small effect-size. No interaction effect of sex and age was found (p = .49).

Please insert Table 2 here

## Discussion

In the current study, we examined the psychometric properties of a scale for flourishing in a Hong Kong Chinese children sample. The CFS demonstrated good internal consistency and validity. Only a weak negative correlation was found between flourishing and anxiety. Consistent with existing theories (Wong, 2011) and findings (Keyes, 2002, 2005), flourishing is not equivalent to an absence of mental illness. Instead, there are sub-groups of people who have high anxiety but flourishing, and some have low anxiety but lacking flourishing. While anxiety is a common proxy to represent mental illness, this study does not cover other common mental health signs such as depressive mood due to the length constraint of the protocol. Future studies can examine common childhood mental health conditions such as depressive mood and irritability.

The current study examined the relation between flourishing and positive feeling. Through model comparison, we found that a model that specifies two separate latent factors for flourishing and positive feeling fits the data better than the one that restricts a unitary latent factor. This finding aligns well with recent formulations toward well-being (Wong, 2022) and is probably not surprising in adult populations (e.g., Huppert & So, 2013). An adult is capable of representing a positive self-image by integrating the past and the future, despite experiencing unpleasantness at the moment (Baumeister et al., 2013). It is, however, not known whether children have developed such cognitive capacity. The current study provided a significant contribution to the literature that children as young as grades 3 to 6 demonstrate understanding toward meaningfulness as a distinct concept from simply pleasantness.

Flourishing and positive feeling were both uniquely predicting anxiety. This finding has two important implications. First, it again supports the distinction between the two constructs in children. The effects of either cannot be explained by the other. This is pioneer because previous studies in the children population did not differentiate the predictive power of flourishing and positive feelings (e.g., Liddle & Carter, 2015; Opree et al., 2018). Second, it is not consistent with previous findings in other age groups. Flourishing, when controlling for positive feeling, explained all effects of positive feeling toward anxiety in adolescents aged 12–17 (Duan & Xie, 2019) and became positively correlated with anxiety in adults aged 18–78 (Baumeister et al., 2013). Although arguably these differences with our current findings may be due to measurement issues, it is plausible that they reflect the developmental trajectory of flourishing. The concept of meaningfulness may be developing in children, but not as important as in adolescents, nor can it buffer the influence from feeling as in adults.

By suggesting that positive feeling is differentiable from flourishing, we are not trying to downplay its importance. In fact, a high correlation was found between the two factors. Feeling less positive can contribute to less flourishing. Having both arguably is the best for mental well-being (Huppert & So, 2013; Liddle & Carter, 2015; Ryan & Deci, 2001). While the current scale focuses on flourishing, future studies can further improve the assessment of child's mental well-being by incorporating positive feeling and other important aspects of flourishing as well (e.g., the spiritual dimension, for a discussion, see Wong, 2023a). Specifically, spiritually oriented well-being is based on people's basic spiritual needs for faith-hope-love. Cultivating such

spiritual virtues enables children and adults to cope more effectively with fears and anxieties beyond their control. More importantly, they give them the reasons for living by weaving a coherent life story based on lessons from the past, hope for achieving a fulfilling future, and a sense of love and belonging with family, friends, and community. A sense of life worth living prevents them from despair and ending their own life (Soper, 2021; Wong, 2022). In future studies, including item(s) that capture the spiritual level in children could broaden the scope of how flourishing is defined.

The flourishing scale validated in this study can readily be used in applied settings. By incorporating a measure for flourishing in community screening tests, health care resources can be prioritized to the people who have mental illness and are languishing (i.e., low in flourishing) at the same time. This approach can facilitate screening those who need health care resources the most and increase the effectiveness of deployingintervention resources. While increasing concern is raised about child's flourishing (Abrams, 2023; Howell et al., 2013; Taylor et al., 2020), the scale can also be used in school settings to evaluate educational programs for enhancing children's flourishing (Opree et al., 2018). Given that a large sample size was used in the current study, and the final samples consisted of representative children sample in Hong Kong, the scale's descriptive statistics (i.e., means and standard deviations) could be made use of by local health care and educational professionals to inform resource planning. It also enables future studies in comparing the general flourishing level with other age groups in Hong Kong, as well as comparison studies across cultures.

In summary, the child flourishing scale has been translated into Chinese and has been adapted to children's language. Based on a Hong Kong sample, we found that children can readily differentiate flourishing from positive feeling. This study could not afford evaluating the discriminant validity of the scale. Yet, the tool received support for its good internal consistency and convergent validity. It can be used to support future research in children's well-being, and can potentially facilitate individual assessment and program evaluation in clinical and educational settings. The need to further expand the conceptualization of flourishing, namely, the spiritual element and the meaning of suffering was discussed. Lastly, future studies can examine the developmental trajectory of flourishing in a wider age range and across different cultures .

#### References

Abrams, Z. (2023, January 1). Kids' mental health is in crisis. Here's what psychologists are doing to help. *Monitor on Psychology*, 54(1).

https://www.apa.org/monitor/2023/01/trends-improving-youth-mental-health

- Barnhart, S., Bode, M., Gearhart, M. C., & Maguire-Jack, K. (2022). Supportive neighborhoods, family resilience and flourishing in childhood and adolescence. *Children*, 9(4), Article 495. <u>https://doi.org/10.3390/children9040495</u>
- Baumeister, R. F., Vohs, K. D., Aaker, J. L. & Garbinsky, E. N. (2013). Some key differences between a happy life and a meaningful life. *The Journal of Positive Psychology*, 8(6), 505–516. <u>https://doi.org/10.1080/17439760.2013.830764</u>
- Bravo-Sanzana, M., Oriol, X., & Miranda, R. (2022). Characterization of wellbeing and its relationship with exposure to violence in Mexican and Chilean early and late adolescents during the COVID-19 pandemic. *Child Indicators Research*, 15(2), 553–578. <u>https://doi.org/10.1007/s12187-021-09905-1</u>
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302. https://psycnet.apa.org/doi/10.1037/0033-2909.125.2.276
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D.-W., Oishi, S., et al. (2010). New wellbeing measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143–156. <u>https://doi.org/10.1007/s11205-009-9493-y</u>

- Duan, W., & Xie, D. (2019). Measuring adolescent flourishing: psychometric properties of flourishing scale in a sample of Chinese adolescents. *Journal of Psychoeducational Assessment*, 37(1), 131–135. <u>https://doi.org/10.1177/0734282916655504</u>
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin*, 126(5), 248–269. <u>https://psycnet.apa.org/doi/10.1037/0033-</u>
  <u>2909.126.5.748</u>
- Halle, T. G. (2003). Emotional development and well-being. In M. H. Bornstein, C. L. M. Keyes,
  & K. A. Moore (Eds.), *Well-being: Positive development across the life course* (pp. 125–138). Lawrence Erlbaum Associates Inc. Publishers.
- Holliman, A., & Sheehy, K. (Eds.) (2023). Overcoming adversity in education. Routledge.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53–60.
- Howell, A. J., Keyes, C. L., & Passmore, H. A. (2013). Flourishing among children and adolescents: Structure and correlates of positive mental health, and interventions for its enhancement. In C. Proctor & P. A. Linley (Eds.), *Research, applications, and interventions for children and adolescents* (pp. 59–79). Springer.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis:
   Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <u>https://doi.org/10.1080/10705519909540118</u>
- Huppert, F. A., & So, T. T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research*, *110*, 837–861. https://doi.org/10.1007/s11205-011-9966-7

- Keyes, C. L. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207–222. https://doi.org/10.2307/3090197
- Keyes, C. L. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology*, 73(3), 539–548. <u>https://psycnet.apa.org/doi/10.1037/0022-006X.73.3.539</u>
- Keyes, C. L. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist*, 62(2), 95–108. <u>https://psycnet.apa.org/doi/10.1037/0003-066X.62.2.95</u>
- Kristjánsson, K. (2017). Recent work on flourishing as the aim of education: A critical review. *British Journal of Educational Studies*, 65(1), 87–107. https://doi.org/10.1080/00071005.2016.1182115
- Kwong, T. Y., & Hayes, D. K. (2017). Adverse family experiences and flourishing amongst children ages 6–17 years: 2011/12 National Survey of Children's Health. *Child Abuse & Neglect*, 70, 240–246. <u>https://doi.org/10.1016/j.chiabu.2017.06.016</u>
- Li, J. C. H., Lau, W. Y., & Au, T. K. F. (2011). Psychometric properties of the Spence Children's Anxiety Scale in a Hong Kong Chinese community sample. *Journal of Anxiety Disorders*, 25(4), 584–591. <u>https://doi.org/10.1016/j.janxdis.2011.01.007</u>
- Liddle, I., & Carter, G. F. (2015). Emotional and psychological well-being in children: the development and validation of the Stirling Children's Well-being Scale. *Educational Psychology in Practice*, 31(2), 174–185. <u>https://doi.org/10.1080/02667363.2015.1008409</u>

- López-Pérez, B., Sánchez, J., & Gummerum, M. (2016). Children's and adolescents' conceptions of happiness. *Journal of Happiness Studies*, 17(6), 2431–2455. https://doi.org/10.1007/s10902-015-9701-1
- López-Pérez, B., & Wilson, E. L. (2015). Parent–child discrepancies in the assessment of children's and adolescents' happiness. *Journal of Experimental Child Psychology*, 139, 249–255. <u>https://doi.org/10.1016/j.jecp.2015.06.006</u>
- Mesurado, B., Crespo, R. F., Rodríguez, O., Debeljuh, P., & Carlier, S. I. (2021). The development and initial validation of a multidimensional flourishing scale. *Current Psychology*, 40, 454–463. <u>https://doi.org/10.1007/s12144-018-9957-9</u>
- Opree, S. J., Buijzen, M., & Van Reijmersdal, E. A. (2018). Development and validation of the psychological well-being scale for children (PWB-c). *Societies*, 8(1), 18. <u>https://doi.org/10.3390/soc8010018</u>
- Rogers, B. A., Chicas, H., Kelly, J. M., Kubin, E., Christian, M. S., Kachanoff, F. J., Berger, J.,
  Puryear, C., McAdams, D. P., & Gray, K. (2023). Seeing your life story as a Hero's
  Journey increases meaning in life. *Journal of Personality and Social Psychology*.
  Advance online publication. <u>https://doi.org/10.1037/pspa0000341</u>
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1–36. <u>https://doi.org/10.18637/jss.v048.i02</u>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141–166. <u>https://doi.org/10.1146/annurev.psych.52.1.141</u>

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <u>https://psycnet.apa.org/doi/10.1037/0022-3514.69.4.719</u>

Soper, C. A. (2021). The evolution of life worth living: Why we choose to live. Author.

- Spence, S. H. (1998). A measure of anxiety symptoms among children. *Behaviour Research and Therapy*, *36*(5), 545–566. <u>https://doi.org/10.1016/S0005-7967(98)00034-5</u>
- Spence, S. H., Barrett, P. M., & Turner, C. M. (2003). Psychometric properties of the Spence Children's Anxiety Scale with young adolescents. *Journal of Anxiety Disorders*, 17(6), 605–625. <u>https://doi.org/10.1016/S0887-6185(02)00236-0</u>
- Tang, X., Duan, W., Wang, Z., & Liu, T. (2016). Psychometric evaluation of the simplified Chinese version of flourishing scale. *Research on Social Work Practice*, 26(5), 591–599. https://doi.org/10.1177/1049731514557832
- Taylor, E., Verhulst, F., Wong, J. C. M., Yoshida, K. (Eds.) (2020). Mental health and illness of children and adolescents. Springer.
- Tong, K. K., & Wang, Y. Y. (2017). Validation of the flourishing scale and scale of positive and negative experience in a Chinese community sample. *PLoS One*, 12(8), Article e0181616. <u>https://doi.org/10.1371/journal.pone.0181616</u>
- Wolbert, L., de Ruyter, D., & Schinkel, A. (2021). The flourishing child. *Journal of Philosophy* of Education, 55(4-5), 698–709. <u>https://doi.org/10.1111/1467-9752.12561</u>
- Wong, G. (2019, May 5). Gary Wong: Schools, communities can help children cope beyond Mental Health Week. Vancouver Sun. <u>https://vancouversun.com/opinion/op-ed/gary-</u> <u>wong-schools-communities-can-help-children-cope-beyond-mental-health-week</u>

- Wong, P. T. P. (2011). Positive psychology 2.0: Towards a balanced interactive model of the good life. *Canadian Psychology*, 52(2), 69–81. https://psycnet.apa.org/doi/10.1037/a0022511
- Wong, P. T. P. (2017). Existential theoretical framework. In A. Wenzel (Ed.), *The Sage encyclopedia of abnormal and clinical psychology* (pp. 1375–1378). Sage.
  <u>http://www.drpaulwong.com/existential-theoretical-framework /</u>
- Wong, P. T. P. (2021). The Frankl cure for the 21st century: Why self-transcendence is the key to mental health and flourishing. *The International Forum for Logotherapy*, 41(2), 33–50. Doi: 10.31234/osf.io/tbx3f
- Wong, P. T. P. (2022). Review of The Evolution of Life Worth Living: Why we choose to live. International Journal of Wellbeing, 12(3), 101–112. https://doi.org/10.5502/ijw.v12i3.2395
- Wong, P. T. P. (2023a). Spiritual-existential wellbeing (SEW): The faith-hope-love model of mental health and total wellbeing. *International Journal of Existential Positive Psychology*, 12(1). <u>https://www.meaning.ca/ijepp-article/vol12-no1/spiritual-existentialwellbeing/</u>
- Wong, P. T. P. (Ed.). (2023b). A second-wave positive psychology in counselling psychology: A paradigm shift. Routledge.
- Wong, P. T. P., Cowden, R. G., Mayer, C.-H., & Bowers, V. L. (2022). Shifting the paradigm of positive psychology: Toward an existential positive psychology of wellbeing. In A. H. Kemp (Ed.), *Broadening the scope of wellbeing science: Multidisciplinary and interdiscipinary perspectives on human flourishing and wellbeing* (pp. 13–27). Palgrave Macmillan. <u>https://doi.org/10.1007/978-3-031-18329-4\_2</u>

Wong, P. T. P., & Wong, L. C. J. (2012). A meaning-centered approach to building youth resilience. In P. T. P. Wong (Ed.), *The human quest for meaning: Theories, research and applications* (pp. 585–617). Routledge.

# Table 1

Principal Component Analysis of the Child Flourishing Scale (CFS): Factor Loadings, Means

(M), and Standard Deviations (SD)

	Item	Loading	$h^2$	М	SD
5. Self-esteem	In general, I feel very positive about myself.	.73	.53	3.68	1.02
2. Meaning	I generally feel that what I do in my life is valuable and worthwhile.	.71	.51	3.78	1.03
1. Optimism	I am always optimistic about my future.	.70	.50	3.78	0.98
11. Competence	Most days I feel a sense of accomplishment from what I do.	.70	.49	3.57	1.11
10. Vitality	(In the past week) I had a lot of energy.	.69	.48	3.63	1.11
4. Positive relationships	I have good interpersonal relationships.	.68	.46	3.76	1.03
7. Competence	I am capable enough to deal with my daily activities.	.61	.38	3.89	1.00
8. Positive relationships	There are people in my life who really care about me.	.61	.38	3.97	1.11
9. Engagement	I love learning new things.	.58	.34	4.08	1.01
6. Emotional stability	(In the past week) I felt calm and peaceful.	.57	.32	3.36	1.22
3. Resilience	When things go wrong in my life it generally takes me only a while to get back to normal.	.55	.30	3.49	1.16

## Table 2

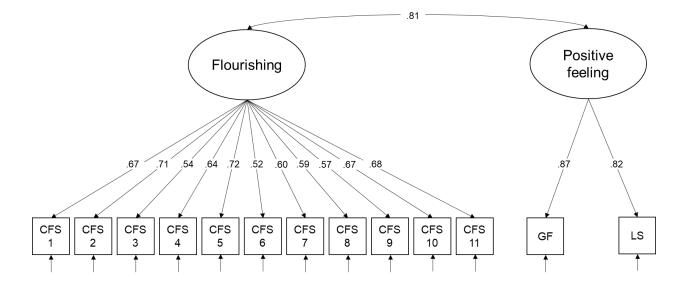
	М	SD	п	
Total	40.95	7.81	5023	
Sex				
Male	40.00	8.13	2589	
Female	41.96	7.33	2434	
Age				
7	41.43	7.31	14	
8	42.01	8.08	1164	
9	40.99	8.07	1556	
10	40.63	7.56	1336	
11	40.15	7.38	848	
12+	39.02	6.04	105	

Child Flourishing Scale Total Score by Sex and Age

*Note*. The current study targets children from primary 3 to 6, who are usually aged between 8 and 11. Some participants in our sample, however, were aged beyond this range, due to individual reasons such as grade retention and late start of schooling. Those aged between 12 and 16 were compiled to reflect a clearer pattern of results.

# Figure 1

Confirmatory Factor Analysis of a Two-factor Model for Flourishing and Positive Feeling



*Note.* Loadings are standardized values. Two sided arrows are correlations. For abbreviations, CFS = Child Flourishing Scale, GF = General feeling, LS = Life satisfaction

# Appendix

Table S1

## Items of Child Flourishing Scale in Chinese

[兒童殷盛感量表一中文版 (Child Flourishing Scale—Chinese version)]

以下問卷內容涵蓋生活上不同層面,請仔細閱讀下列問題,並回答每一條問題,將合適的數字畫

圈。答案絕無對錯之分,請如實作答。

		非常 不同意	不同意	既不反對 也不同意	同意	非常 同意
1	我常對將來感到樂觀。	1	2	3	4	5
2	一般而言,我覺得我的人生 是充滿意義和價值的。	1	2	3	4	5
3	當不如意的事情發生時,我 通常很快就會平復。	1	2	3	4	5
4	我的人際關係十分良好。	1	2	3	4	5
5	一般而言,我自我感覺十分 良好。	1	2	3	4	5
6	(在過去的一個星期裡)我在大 多數時候感到平靜和安寧。	1	2	3	4	5
7	對於我的日常活動,我有足 夠的能力處理。	1	2	3	4	5
8	我身邊有些人真心對我作出 關懷。	1	2	3	4	5
9	我喜愛學習新事物。	1	2	3	4	5
10	(在過去的一個星期裡)我大多 數時候是充滿幹勁的。	1	2	3	4	5
11	我大多數時候從我所做的事 情中得到成就感。	1	2	3	4	5

© Child Flourishing Scale – Chinese version; Lo, Fok, & Cheung, 2023; modified from Huppert & So, 2010 with permission

26