

## **Mainland Chinese primary and middle-school students' social and emotional wellbeing.**

题目:中国大陆中小学生的社交心理健康

Helen Askill-Williams<sup>a</sup>, Grace Skrzypiec<sup>b</sup>, Yan Jin and Larry Owens<sup>c</sup>.

<sup>a</sup>*Flinders University, South Australia*

<sup>b</sup>*Xueqin Zhao, Wenping Du, Fei Cao, Lihong Xing, China*

<sup>c</sup>*Beijing Academy of Educational Sciences, Beijing, China.*

Educators in mainland China are increasingly concerned about promoting school students' social and emotional wellbeing. However, there has been little exchange of research between China and western countries about this topic. For example, questionnaires developed in the west have not been generally available to mainland Chinese researchers. We translated three existing wellbeing questionnaires into simplified Chinese characters and administered the questionnaires to 2756 students aged 10 to 15 attending 16 schools in Beijing. Results showed that students generally reported positive wellbeing, with only small proportions of students indicating languishing mental health. Comparisons between Chinese and Australian students of similar ages indicated that the Chinese students reported slightly higher wellbeing scores. However, as students in both countries grew older, their wellbeing scores became significantly lower. This study provides foundational information to underpin future work in Beijing schools to promote students' social and emotional wellbeing.

**Keywords:** Students' social and emotional wellbeing; mainland China; measuring wellbeing

First submission 6<sup>th</sup> June 2016; Accepted for publication 4<sup>th</sup> September 2016.

<sup>1</sup> Corresponding author. Email address: [helen.askell-williams@flinders.edu.au](mailto:helen.askell-williams@flinders.edu.au)

## Introduction

Students' social and emotional wellbeing is of global topical interest, as represented by burgeoning literature in the USA, UK, Europe and Australia (Lendrum & Humphrey, 2015), government policy directives (e.g., COAG, 2012), and school-based initiatives such as PATHS (Kam, Greenberg, & Walls, 2003), SEAL (Hallam, 2009; Lendrum, Humphrey, & Wigelsworth, 2013), CASEL initiatives (2015b), KidsMatter (2013) and MindMatters (beyondblue, 2014). This interest is related to appreciation of the importance of the social and emotional development of young people (UN, 2015; WHO, 2014), the quality of students' school life (Askell-Williams & Lawson, 2015), and links between students' mental health and their academic outcomes (CASEL, 2015a; Dix, Slee, Lawson, & Keeves, 2012). Layard and Hagell (2015), in accord with many scholars (e.g., CASEL, 2015b), proposed that:

Schools should make the well-being of their children a major objective, and this should include the children's sense of social obligation and also how they feel inside: are they fulfilled or are they anxious or depressed? Every school should have a well-being policy, affecting the whole life of the school. There is good evidence that schools with such a policy improve their outcomes on all fronts. (p. 116)

Layard and Hagell proposed that it is necessary to institute a system of measuring wellbeing so that progress can be identified and tracked. Diener and Tay (2015) also argued that nations should track citizens' subjective and psychological wellbeing in order to usefully inform policy directions, going beyond indicators such as economic performance.

Some studies of Chinese adults' wellbeing are available (Diener, Oishi, & Lucas, 2015; Diener & Tay, 2015). For example, the 2015 World Happiness Report (Helliwell, Huang, & Wang, 2015), using data from the Gallup World Poll, reported that interacting indicators such as Gross Domestic Product, social support, life expectancy, freedom to make life choices, generosity and perceptions of corruption placed Chinese participants at a Happiness rank of 84 in 158 countries. However, such measurements and ranks are very broad indicators. Little detailed research about population wellbeing, in particular student wellbeing, has crossed from eastern to western literature, and vice versa, especially with mainland China. Increasing attention is turning to the quality of Chinese education systems, and within those systems, to Chinese students' social and emotional wellbeing.

### *The Chinese cultural context and school-student wellbeing*

Since the establishment of the People's Republic of China in 1949, tremendous changes have taken place in the field of education in mainland China, aligned to four historical stages. From 1949 to 1965, the first stage was characterised by an emphasis on political development; from 1966 to 1976, during the Cultural Revolution, ideological concerns saw a decline in educational provisions across the country; from 1977 to 2000, the third stage saw a period of recovery in the whole educational system; and from 2001 until the present has seen dramatic development in education, with China interested in learning from the educational trends of the western world (Luo & Arndt, 2010).

Since the turn of the 21st century a small body of literature on students' wellbeing (especially concerning the study of happiness and subjective wellbeing) by scholars of mainland China has been associated with the fourth educational stage (Chen & Davey, 2008). For example, suggestions to promote students' wellbeing have included building up close school and family collaboration (Shen, 2015); experimenting with a 'four-autonomous' learning platform (Zhang, 2012) and alleviating students' homework burden (Li & Li, 2012).

Chinese society takes pride in its multi-cultural nature, whereby Confucianism, Taoism and Buddhism form three formative cultural foundations (Zeng & Guo, 2012). These cultures acknowledge wellbeing as a state of harmony. Confucian values emphasise interpersonal harmony as wellbeing; Taoists consider wellbeing as the harmony between self and surroundings (i.e., nature and universe); and according to Buddhism, wellbeing lies in the spiritual harmony of self (Gao, Zheng, & Yan, 2010). As Confucius (2006) said, "benevolent person forgets worries" (Part 2, 9.29), in order to preserve long-term wellbeing. Meanwhile, the Taoist dialectic view of wellbeing advocates the Fuhuo (fortune and misfortune) dependencies (Zeng & Guo, 2012), which calls for a rational and proper attitude to wellbeing. In addition, the aesthetic pursuit is deemed as the ultimate wellbeing for Chinese people (Li, 2005).

In contemporary China, a harmonised society and people's wellbeing have been highlighted among the key goals of Chinese Communist Party (CCP) at the Fourth Plenum of the 16th Party Central Committee (CCPCC, 2004), embedded in the proposal to build up a moderately prosperous society at the 18th CCP National Congress (Chen & Cui, 2014). In particular, prompted by ex-President Hu Jintao's (Hu, 2007) drive for putting people first and a scientific outlook on development, the promotion of students' wellbeing is of key concern in Chinese educational contexts.

However, Chen and Davey (2008) argued that research in this field is still relatively rare and somewhat hampered by inadequate descriptions of research methodologies and isolation from studies published outside of mainland China. Accordingly, this article reports a collaborative study by the Chinese and Australian authors who maintain a shared interest in promoting student wellbeing. We conducted a foundational descriptive study to address the broad research question: 'What is the nature of the social and emotional wellbeing of mainland Chinese students?' In addition, we were interested in investigating, 'What are the similarities and differences between Chinese and Australian students' social and emotional wellbeing'.

### *The Chinese school context*

Table I provides an indicative overview of Chinese students' typical school day. Although there is variation between schools, it can be seen that the typical school day begins with self-study (checking homework and preparing for the day's lessons) and exercises in the playground. All students are expected to be at school for morning exercises. Class lessons typically begin at 8:30 am and finish at 3:30 pm to 5 pm, depending upon the students' grade. Class sizes range from 30-40 students. Many students, whose parents can afford to pay, also attend after-school cram-classes or are supported by private tutors.

Some authors have expressed concerns about the impact of the length and demands of the Chinese school day (and homework demands) on students' wellbeing (e.g., see Sun, Dunne, & Hou, 2012; Wei, 2014).

By way of comparison, although there is variation between schools, in Australia the typical school day starts at 9am and finishes at 3:30pm, with recess at 11am and lunch at 1pm. The average class size is 25. Lessons last about 45 minutes. The Foundation to Year 10 compulsory subjects include Maths, English, Science, Health and Physical Education, Technologies, Humanities and Social Sciences, Languages and the Arts. Many students are assigned homework on five nights per week. Students are expected to apply themselves to their homework for about 20 to 60 minutes per night, with more time spent on homework as they progress through the grades.

**Table I. Typical Chinese School Days**

Grade	Start	Finish	Morning lessons	Afternoon lessons	Lesson duration	Breaks	Lunch	Typical class size	Compulsory subjects	Non-compulsory subjects	Homework per week	Homework per night
5	7:50 AM	3:30-4:30 PM	4 to 5	3 to 4	30-40 min.	10 min. between 2 lessons	12-1:30 PM	35-40	Chinese, maths, English, science, PE, politics, fine arts, music, ICT	PE (badminton, swimming, football, etc.); musical instruments, etc.	6 nights	1 hour
6	7:50 AM	3:30-4:30 PM	4 to 5	3 to 4	30-40 min.	10 min. between 2 lessons	12-1:30 PM	35-40	Chinese, maths, English, science, PE, politics, fine arts, music, ICT	PE (badminton, swimming, football, etc.); musical instruments, etc.	6 nights	1 hour
7	7:40 AM	4:00-5:00 PM	4	4	45 min.	10 min. between 2 lessons	12-1:30 PM	45	Chinese, maths, English, politics, PE, history, geography, biology, music, fine arts, ICT	PE (badminton, swimming, football, etc.); musical instruments, calligraphy, Chinese painting, etc.	7 nights	1.5-2 hours
8	7:40 AM	4:00-5:00 PM	4	4	45 min.	10 min. between 2 lessons	12-1:30 PM	45	Chinese, maths, English, politics, PE, history, geography, biology, physics, music, fine arts, ICT	PE (badminton, swimming, football, etc.); musical instruments, calligraphy, Chinese painting, etc.	7 nights	1.5-2 hours
9	7:40 AM	4:00-5:00 PM	4	4	45 min.	10 min. between 2 lessons	12-1:30 PM	45	Chinese, maths, English, politics, PE, history, physics, chemistry, music, fine arts, ICT	PE (badminton, swimming, football, etc.); musical instruments, calligraphy, Chinese painting, etc.	7 nights	1.5-2 hours

## Method

### *Translation of questionnaires*

We reviewed currently available questionnaires that address various aspects of student wellbeing. Our search uncovered that some scales, such as the Strengths and Difficulties Questionnaire (Goodman, 2005) were available in traditional Chinese characters (as used in, for example, Hong Kong). Although Chen and Davey (2008) have reported that Chinese scholars have been surveying and writing about student wellbeing

since the 1990s, the field is still in its infancy. Verified scales, in simplified Chinese characters (as used in mainland China) and suitable for measuring student wellbeing, appeared to be not readily available on the Chinese mainland.

Through extended discussions between the authors from China and Australia over a period of 12 months we identified three questionnaires that appeared suitable for measuring Chinese students' wellbeing, namely, the Flourishing Scale (Diener et al., 2010), the Mental Health Continuum Short Form (Keyes, 2006) and the Stirling Children's Wellbeing Scale (Liddle & Carter, 2010). These three scales appeared, from the perspectives of the Chinese and Australian authors, to capture the concept of a positive approach to social and emotional wellbeing that seemed suited to the Chinese traditions of harmony and respect. Previous studies in English language contexts had identified that these three scales had good psychometric properties including reliability indices above 0.7 (using Coefficient H, see Hancock & Mueller, 2001) and replicable factor structures across different samples (for a review see Skrzypiec, Askell-Williams, Slee, & Rudzinski, 2014). We obtained permissions from the authors of the questionnaires to translate and use the questionnaires in China. We commissioned independent forward and backward translations, and we conducted a pilot study with a small number of students to check that the translated versions of the questionnaires could be understood by students of a similar age to our proposed sample. After discussions and minor modifications to ensure that the most appropriate words had been selected, we agreed that the translated versions of the three questionnaires were suitable for administration. Students were able to complete the questionnaire battery in approximately one (40 minute) class lesson.

Reliability indices (Coefficient H: Hancock & Mueller, 2001) of the three questionnaires with the current sample were: Flourishing (one factor), 0.978; Mental Health Continuum (three factors), Emotional Wellbeing, 0.922; Social Wellbeing 0.880; Psychological Wellbeing, 0.914; Stirling Children's Wellbeing Scale (two factors), Positive Outlook, 0.868; Positive Emotional State, 0.732. Pearson correlations between the three scales were all above 0.8.

### *Ethics and Consents*

Ethics approval for Chinese researchers to administer the questionnaire battery to Chinese students was obtained from the Beijing Academy of Educational Sciences (BAES), which has responsibility for undertaking broad-ranging research in Beijing schools. Ethics approval for the Australian authors to undertake secondary analysis of the de-identified data collected by the Chinese researchers was obtained from the Social and Behavioural Research Ethics Committee at Flinders University.

BAES sought and obtained permissions to undertake the questionnaire study from the Director of each participating school and the Head Teacher of each participating class. In Beijing, schools advise parents/caregivers that educational research studies involving their children may be conducted throughout each academic year. In practice, very few parents withhold consent for their child's involvement in school-based research projects. Similarly, very few Chinese students withhold their consent to engage with school-based research projects.

## Participants

The BAES has an ongoing working relationship with a large number of schools in Beijing to undertake school-based research. From the available schools, the BAES selected eight primary and eight secondary schools to represent a broad range of 2756 students in 64 classes in Grades 5 to 9 (aged 10 to 15). The schools are located in four districts in Beijing. There are four categorisations of districts in the Beijing developmental plan. These are, in order of distance from Beijing central, Capital core function area; Urban extended function area; Urban new development area; and Ecological sustainable development area. The four districts containing the participating schools are located in areas two and three, and are spread across the west, south and east of Beijing.

Beijing districts consist of houses that have been owned by families for generations, as well as newer houses and families who have recently moved into the metropolis. In each district there is a range of lower, medium, and higher socio-economic status. Accordingly, overall, it would be incorrect to represent particular Beijing districts as upper or lower socio-economic status, given the broad mix of inhabitants. However, an indication of the socio-economic status of our four sampled districts can be gained from a comparison of the disposable income per capita of the 16 Beijing districts and 2 counties. From Table II it can be seen that the districts containing the 16 participating schools are slightly below the Beijing average in disposable income, but fall within the common range of incomes.

**Table II: Comparison of disposable income per capita of Beijing districts containing participating schools**

Disposable Income per Capita (2013)	RMB
Range	31,132 – 45,953
Average	40,321
Western District A (Urban extended function area); 4 participating schools	37,886
Western District B (Urban extended function area); 4 participating schools	38,657
Southern District C (Urban new development area); 4 participating schools	33,662
Eastern District D (Urban new development area); 4 participating schools	34,128

Source: (Beijing Statistical Information Net, 2016)

The 16 selected schools are all state schools. There are few private schools in China (although there are some International schools). The state schools draw their enrolments from their surrounding districts, and therefore reflect the socio-economic status of their districts. There is no official information available about school-level relative socio-economic status or academic rank.

In previous years certain schools in Beijing (and China) have been nominated as key schools, which indicated a school ranking system. Key schools were determined by an assessment of staff qualifications, teaching awards, and student academic competitions. In 2014 the key school system was discontinued in

Beijing, with a view to promoting equal opportunity for children and fostering greater social harmony (although the key school system does persist in some other provinces). None of the 16 schools in our sample had been previously nominated as key schools. As all students in each grade level were included in the sample in each school, the students represented the full range of academic achievement for their grade at their school.

The Chinese researchers visited the participating classes, explained the purpose, procedures, confidentiality and anonymity of the questionnaires, and delivered and collected the questionnaires. Completion of the questionnaire indicated each student's consent to participate. The researchers did not have access to students' names. The sample consisted of all students present in class on the day of questionnaire delivery.

## Results

### *Demographic information*

Of the 2756 questionnaires that were returned (100% response rate), 1458 were from boys and 1286 were from girls. Table III shows the grade and gender distribution of the sample.

**Table III: Grade and Gender Distribution of Sampled Chinese students**

	Grade	Boys	Girls	Total
<b>Primary school</b>	5	321 (56.5%)	247 (43.5%)	568
	6	285 (52.8%)	255 (47.2%)	540
<b>Middle school</b>	7	291 (53.4%)	254 (46.6%)	545
	8	302 (51.2%)	288 (48.8%)	590
	9	256 (51.8%)	238 (48.2%)	494
<b>Total</b>		1455 (53.2%)	1282 (46.8%)	2737
Missing demographic indicators = 12				
Discarded = 7				

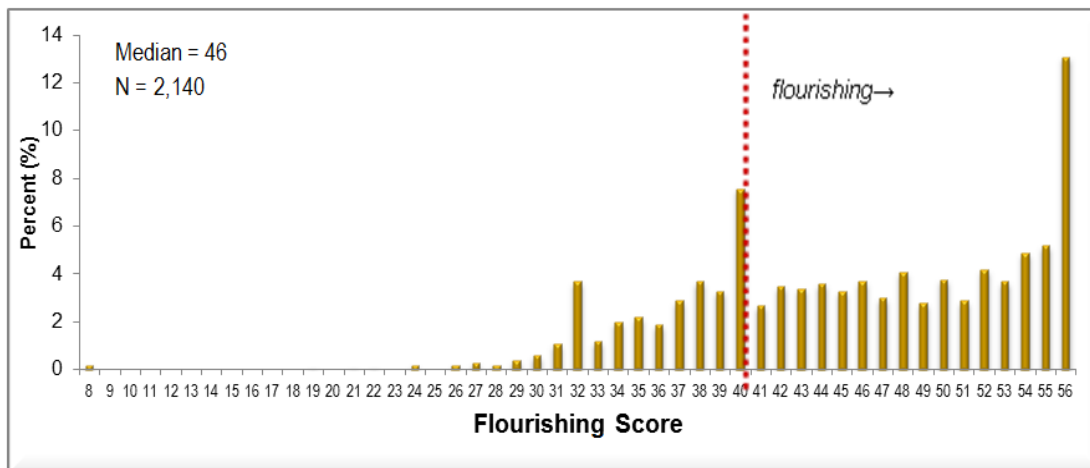
Seven questionnaires with minimal variance (e.g., same response for all items) or with more than 50% of responses missing were discarded. Furthermore, the Stirling Children's Wellbeing scale (Liddle &

Carter, 2010) contained three items designed to identify students who provided socially desirable responses, such as ‘I like everyone I have met’. The responses of 545 (19.8%) students who selected Strongly Agree (score 7) on all three of the socially desirable items indicated that those participants might be favouring compliant responses, thus reducing the credibility of the results. Inspection of the distributions of the response patterns for those students indicated that their data did appear to be overly skewed towards socially desirable responding, and accordingly 545 questionnaires were removed from further analysis.

The next step in our analysis was to calculate the students’ scores on each of the three scales in the questionnaire. The amount of missing data was relatively small, in the order of 1% to 2% per item. For all analyses, we adopted a conservative approach of non-replacement of missing data.

### *The Flourishing Scale*

The Flourishing scale by Diener et al. (Diener et al., 2009; Diener et al., 2010) is founded in the positive psychology approach, with a particular focus on a strengths-based rather than deficit –based approach to psychological wellbeing. The eight items from the Flourishing Scale were summed, following Diener et al.’s (2009) method, to obtain a total Flourishing score for each student. Scores ranged from 8 to 56 (the maximum possible score). As shown in Figure 1, data were highly skewed, with a median score of 46; most students favoured the positive end of the scale.

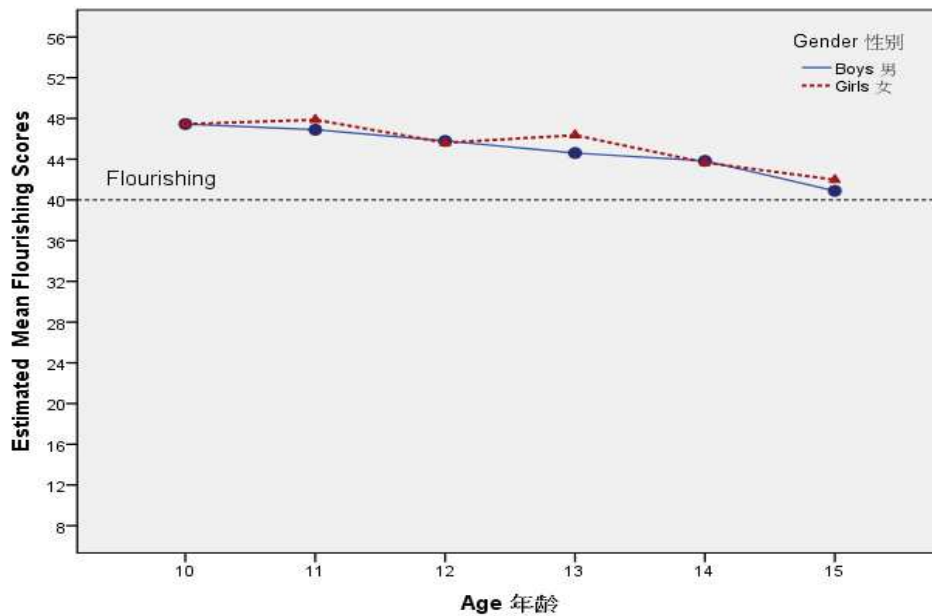


**Figure 1: Flourishing scale (Diener et al. 2010) scores of Chinese students aged 10-15**

Diener et al. (2009) did not stipulate cut-off values to delineate participants who were flourishing or not flourishing. However, a participant who selected ‘agree’, ‘strongly agree’ or ‘very strongly agree’ for every item would have a total Flourishing score of 40 or higher. Using this criterion we determined that a score above this cut-off point would be a reasonable indicator of flourishing. Just under three quarters (67.9%; N = 1452) of the participants had a Flourishing score above 40, leaving 32.1% below the cut-off point. Note



from Figure 2 that the flourishing scores of girls and boys were quite similar, and that flourishing scores significantly decreased with age ( $F(5) = 21.92, p < .0001$ ).



**Figure 2: Flourishing scale (Diener et al. 2010) scores for Chinese boys and girls aged 10-15**

*The Mental Health Continuum: Flourishing and Languishing (Keyes, 2006)*

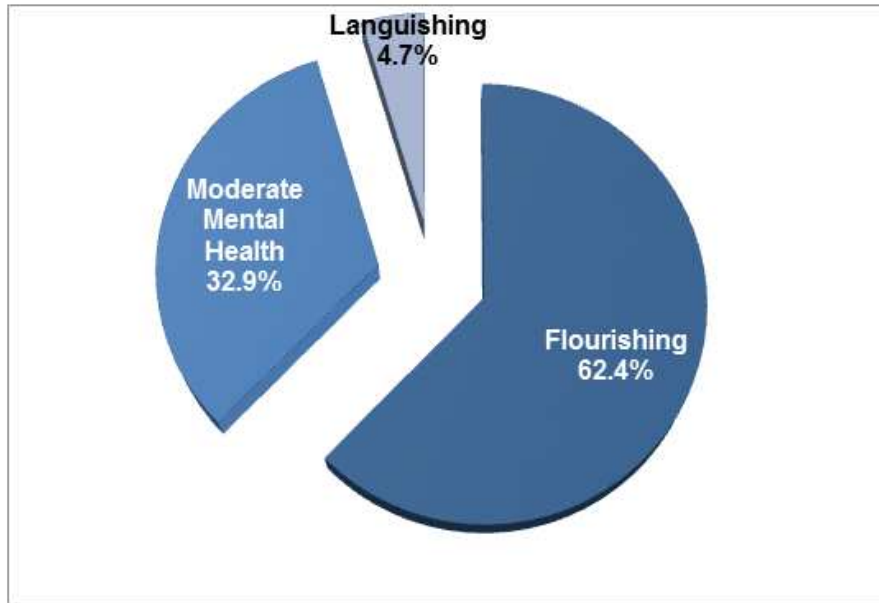
The Mental Health Continuum also employs the concept of flourishing, and its opposite, languishing, along a continuous dimension of psychological wellbeing. Students were classified as flourishing if they indicated they had experienced at least one of the three items about emotional wellbeing and at least six of the eleven items about positive functioning ‘almost every day’ or ‘every day’. Using this ‘minimum item’ approach 62.4% of the participants were classified as flourishing, as shown in Figure 3. Meanwhile, students were considered to be languishing if they experienced at least one of the three symptoms of emotional wellbeing and at least six of the eleven symptoms of positive functioning ‘once or twice’ or ‘never’. Using this ‘minimum item’ approach, 4.7% of students were considered to be languishing. The remaining students (32.9%) were considered to have moderate mental health.

*Stirling Children’s Wellbeing Scale*

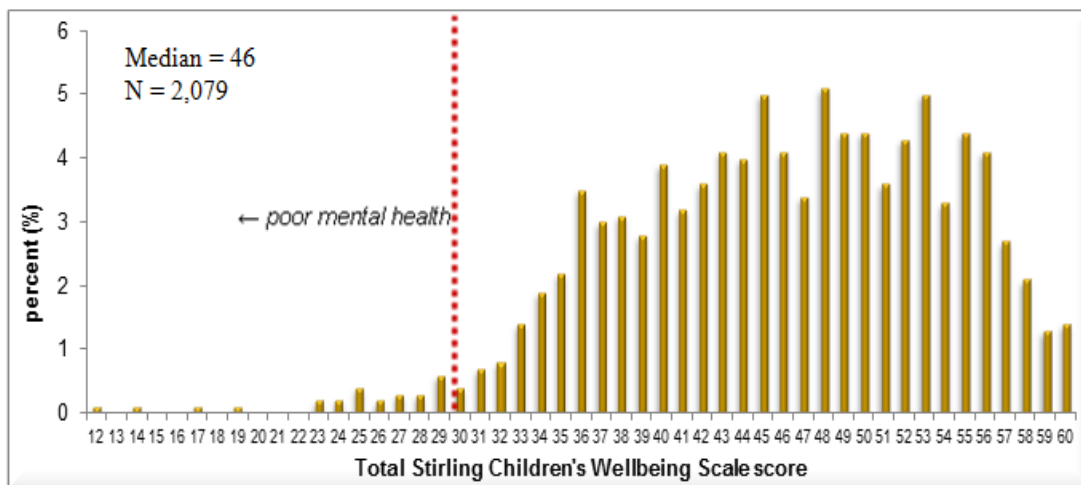
The Stirling Children’s Well-being Scale (Liddle & Carter, 2010) also takes a positive psychology perspective. It contains strengths-based questions about children’s positive outlook and a positive emotional state. A wellbeing score was summed for each respondent, as suggested by Liddle and Carter (2010). Total scores ranged from 12 to 60 (the maximum possible score) with a median of 46, as shown in Figure 4. Liddle

and Carter (2010) suggested that scores of less than 30 indicate poor mental health. A small proportion (3.3%; N = 60) of participants had scores of less than 30.

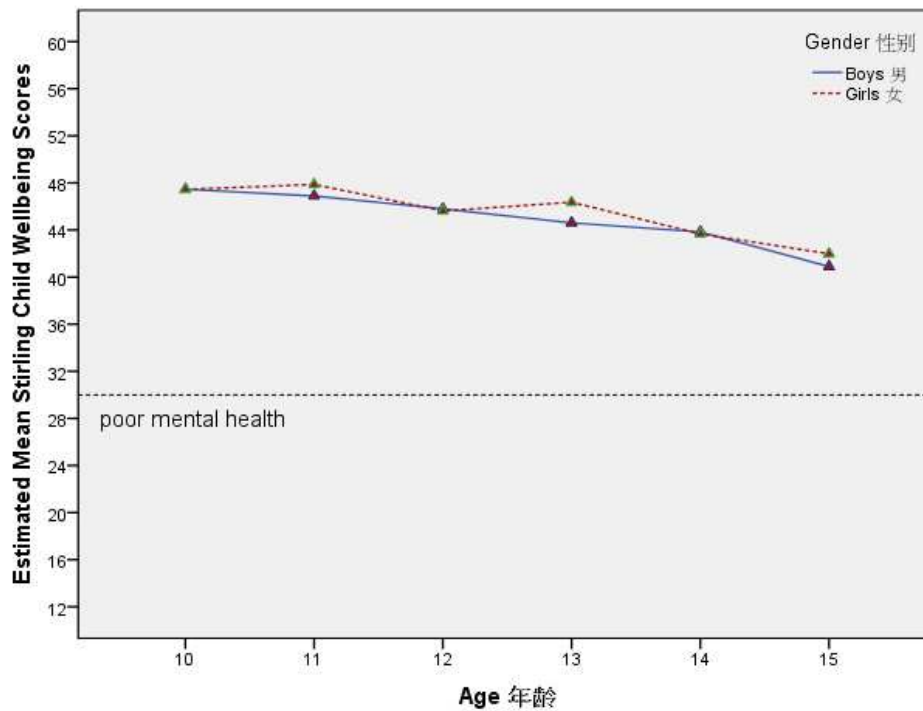
Analysis by gender and age is displayed in Figure 5, which shows that girls' scores were similar or slightly higher than boys' at each age ( $F(1) = 5.76, p < .016, ES (r) = 0.05$ ) but with a very small practical effect size. Boys' and girls' scores both significantly decreased as they grew older ( $F(5) = 21.64, p < .0001$ ). There was no significant interaction between gender and age.



**Figure 2: Percentages of students with Flourishing, Moderate and Languishing scores on Keyes' (2006) Mental Health Continuum**



**Figure 4: Scores of Chinese students aged 10-15 on the Stirling Children's Wellbeing Scale (Liddle & Carter, 2010)**



**Figure 3: Stirling Children's Wellbeing Scale (Liddle & Carter, 2010) scores for Chinese boys and girls aged 10-15**

*Comparisons between Chinese and Australian students*

Diener and colleagues (Diener et al., 2015; 2015) have argued for cross cultural comparisons in order to illustrate how attention to wellbeing can interact with other country development initiatives in economics, health and welfare. The wellbeing questionnaires that we used with the Chinese students had previously been used with a sample of 1930 students, aged 11-16, in grades 6 to 10, from eight metropolitan schools in South Australia (see Skrzypiec et al., 2014). The availability of the data from the Australian study provided the opportunity to undertake secondary data analyses, with a view to comparing the Chinese and Australian students' results on the three measures of wellbeing. Since there were fewer 11 and 12 year old students in the Australian sample and no 16 year old students in the Chinese sample, only data from participants aged 13-15 from each country were included in the analyses. As shown in Table 4, Chinese students were significantly more likely than Australian students to be flourishing, and less likely to be languishing, on all three measures used in this study. Note however that the effect sizes for these differences ranged from trivial to small ( $r = 0.04$  to  $r = 0.15$ ).

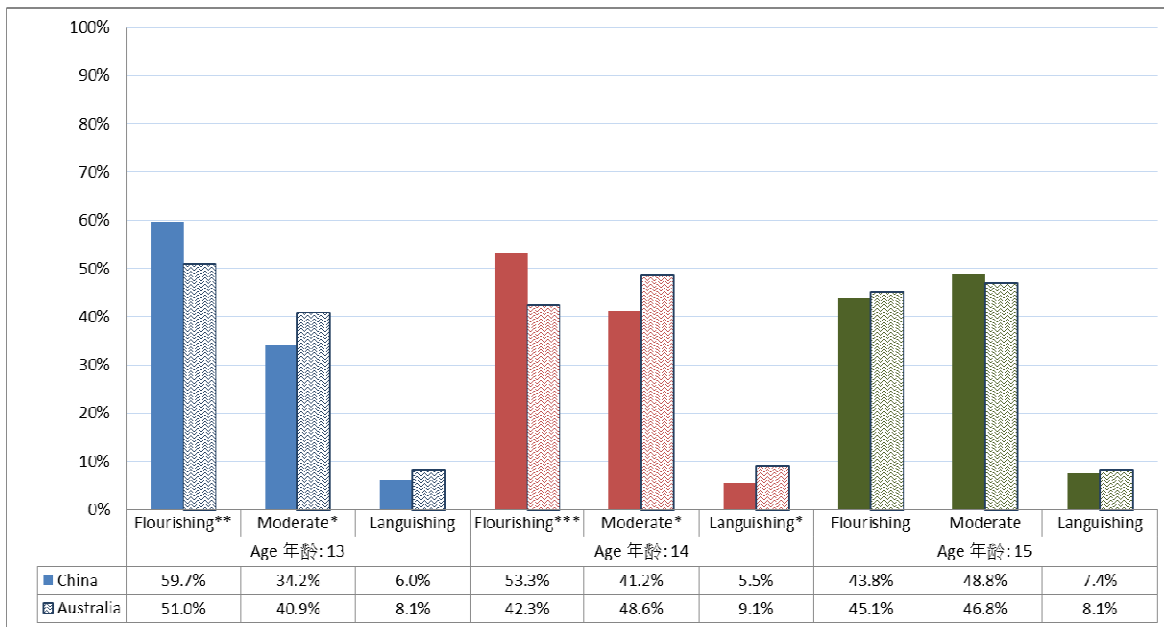
To investigate age differences, we compared Chinese and Australian students' scores on Keyes' Mental Health Continuum at ages 13, 14 and 15. Figure 6 shows that scores decreased as participants grew from 13 to 15 years of age. Between-country differences were significant at  $p < .05$  or less for the students aged 13 and 14, with trivial to small ( $r = 0.01$  to  $0.11$ ) effect sizes.

**Table IV. Comparisons of proportions of Chinese and Australian students aged 13-15 classified into Flourishing, Moderate and Languishing mental health using three measures of wellbeing**

	Flourishing – Positive mental health		Moderate Mental Health		Languishing – Poor mental health	
	Australian %	Chinese %	Australian %	Chinese %	Australian %	Chinese %
Flourishing scale <sup>1</sup> (Diener et al. 2010)	53.7	60.7				
Mental Health Continuum <sup>2</sup> (Keyes 2006)	45.9	54.1	45.7	39.8	8.5	6.1
Stirling Children’s Wellbeing Scale <sup>3</sup> (Liddle & Carter 2010)					8.9	3.5

(China, N = 1,074; Australia, N = 1,404)

1 Mann-Whitney Test,  $Z = -7.22, p < .0001, ES (r) = 0.15$   
 2 MHC- Flourishing: Mann-Whitney Test,  $Z = -4.03, p < .0001, ES (r) = 0.08$ ; MHC- Moderate mental health: Mann-Whitney Test,  $Z = -2.89, p < .004, ES (r) = 0.06$ ; MHC- Languishing: Mann-Whitney Test,  $Z = -2.23, p < .05, ES (r) = 0.04$ ;  
 3 Mann-Whitney Test,  $Z = -6.65, p < .0001, ES (r) = 0.14$ .



\*  $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$

Mann-Whitney Tests: Z scores and practical effect sizes ( $r$ )

Age 13

Mental Health Continuum - Flourishing:  $Z = -2.592, p < .01, ES(r) = 0.09$

Mental Health Continuum - Moderate Mental Health:  $Z = -2.036, p < .042, ES(r) = 0.04$

Mental Health Continuum - Languishing:  $Z = -1.183, p > .05, ES(r) = 0.07$

Age 14

Mental Health Continuum - Flourishing:  $Z = -3.360, p < .001, ES(r) = 0.11$

Mental Health Continuum - Moderate Mental Health:  $Z = -2.088, p < .037, ES(r) = 0.07$

**Figure 4: Comparison of 13 to 15 year old Chinese and Australian students’ scores on Keyes’ (2006) Mental Health Continuum**

## Discussion

This paper reports a survey of mainland Chinese students' wellbeing. Most participants reported that they had positive social and emotional wellbeing. Furthermore, the Chinese students were significantly more likely to be flourishing and less likely to be languishing, with very small to small effect sizes, compared to a similarly-aged sample of Australian students. A study of the wellbeing of 13-17 year old Australian students by Venning, Wilson, Kettler and Elliot (2012) found that 42% of 3,913 adolescents were flourishing. However, Venning et al.'s sample included 17 year old students (9.8%) but no 11 and 12 year old students. Venning et al. (2012) found that flourishing scores were lower for older adolescents. A study by Keyes (2006) of 1,234 American young people aged 12-18 found that 38% were flourishing, 6% were languishing and the remainder (56%) were moderately mentally healthy. Keyes also found that a smaller proportion of adolescents aged 15-18 were flourishing compared to 12-14 year old students. As wellbeing scores appeared to decrease, as age increased, in our Chinese and Australian samples, Venning et al.'s (2012) and Keyes' (2006) studies, it seems reasonable to observe that decreasing wellbeing scores across the teenage years is emerging as a consistent trend. Possible explanations for this effect could be that more attention is given to explicit social and emotional education in the earlier school years; the influences of students' adolescent-related developmental concerns; and increasing academic pressure in higher grades. Another explanation by Liddle and Carter (2010) is that older students may be more likely to understand the (sometimes abstract) questions, possess a better sense of personal identity, and respond more appropriately giving rise to fewer ceiling effects in such questionnaire studies.

Our analysis of the Chinese student's wellbeing scores did not identify gender differences (apart from one small effect size). This is contrary to findings from our comparative South Australian sample (Skrzypiec et al., 2014), in which boys' self-reported scores were higher than girls' scores on all three wellbeing measures. Similarly, recent unpublished results from Scotland using the Stirling Children's Wellbeing Scale also suggested that more girls than boys reported relatively poor mental health (personal communication; P. Davidson, 8/4/2014). An earlier study by Green, McGinnity, Meltzer, Ford and Goodman (2005) with 11 to 15 year old students in the UK found that more girls (4.1%) than boys (3%) reported emotional disorders. And from the USA, a study by Kuter and Deom (2013) indicated that daily feelings of sadness or hopelessness were more likely for females than males. The lack of differences between boys and girls in the present Chinese sample suggests the need for additional qualitative research about culturally specific gender influences on wellbeing.

We need to consider, in this foundational study, whether our findings are a true reflection of differences between students in the two countries, or whether confounding issues may be present. Apparent differences might be due to the translation of the questionnaire items, or that the western questionnaires did not investigate nuances of wellbeing in the Chinese context. For example, Diener, Oishi and Lucas (2015) highlighted that cultural comparisons are influenced by how subjective assessments of wellbeing are conceptualised within cultures. Diener et al. (2015) also recognised the possible influences of collective versus individualist cultures; societal norms about the acceptance of negative emotions; preference for low arousal (calm) versus high arousal (excitement); and valuing of wellbeing. However, these possibilities

notwithstanding, it may well be that the results of our study stand, namely, that in comparison to our Australian participants, our Chinese participants report slightly better wellbeing and are thus more likely to be functioning positively with a positive outlook and disposition.

The method of school selection is most appropriately described as convenience sampling, as is often the case in school-based research given the practicalities of access to school sites. Caution should be exercised when using our findings to interpret events in other contexts. Possible limitations of self-report methods, such as socially desirable responding and blind-spots in self-perceptions must be considered.

## Conclusion

This foundational study provides baseline data about a large sample of mainland Chinese students' social and emotional wellbeing. Future studies could usefully investigate indicators of wellbeing in a broader sample of Chinese students from different ages and socio-economic backgrounds and geographical districts. The current large-sample study has potential to inform the design and evaluation of future intervention programs. This study also provides information about research processes and data-collection instruments that highlight similarities and differences between eastern and western cultures in relation to measuring students' social and emotional wellbeing.

## References

- Askill-Williams, H., & Lawson, M. J. (2015). Relationships between students' mental health and their perspectives of life at school. *Health Education, 115* (Special Edition) (3/4), 249-268.
- Beijing Statistical Information Net. (2016). *Disposable Income per capita in different districts of Beijing* (2005-2013) in RMB. Retrieved on 19<sup>th</sup> July 2016 from: <http://www.bjstats.gov.cn/tjsj/>
- beyondblue. (2014). MindMatters. Retrieved on 13<sup>th</sup> February 2016 from: <http://www.mindmatters.edu.au/>
- CASEL. (2015a). *Outcomes associated with the five [SEL] competencies*. Retrieved on 17<sup>th</sup> February 2015 from: <http://www.casel.org/social-and-emotional-learning/outcomes>
- CASEL. (2015b). *Social and Emotional Learning Core Competencies*. Retrieved on 16<sup>th</sup> March 2016 from: <http://www.casel.org/social-and-emotional-learning/core-competencies>
- CCPCC. (2004). Decision of the Fourth Plenum of the 16th Party Central Committee. Retrieved on 6<sup>th</sup> March 2016 from: [http://en.people.cn/200409/26/eng20040926\\_158384.html](http://en.people.cn/200409/26/eng20040926_158384.html)
- Chen, Y., & Cui, Y. Y. (2014). Investigation and analysis of wellbeing of primary students in Beijing and its resources [北京市小学生幸福感及其来源调查分析]. *China Business, 18*, 88-90.
- Chen, Z., & Davey, G. (2008). Happiness and subjective wellbeing in mainland China. *Journal of Happiness Studies, 9*(4), 589-600.
- COAG. (2012). *Roadmap for National Mental Health Reform (2012-2022)*. Retrieved on 16<sup>th</sup> March 2016 from: <http://www.coag.gov.au/node/482>
- Confucius. (2006). *The Analects* [论语]. Beijing: Zhonghua Book Company
- Diener, E., & Tay, L. (2015). Subjective well-being and human welfare around the world as reflected in the Gallup World Poll. *International Journal of Psychology, 50*(2), 135-149.

- Diener, E., Oishi, S., & Lucas, R. E. (2015). National accounts of subjective well-being. *American Psychologist, 70*(3), 234-242.
- Diener, E., Wirtz, D., Biswas-Diener, R., Tov, W., Kim-Prieto, C., Choi, D., & Oishi, S. (2009). New measures of well-being. *Social Indicators Research Series, 39*, 247-266.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research, 97*, 143-156. doi: 10.1007/s11205-009-9493-y
- Dix, K. L., Slee, P. T., Lawson, M. J., & Keeves, J. P. (2012). Implementation quality of whole-school mental health promotion and students' academic performance. *Child and Adolescent Mental Health, 17*, 45-51.
- Gao, L., Zheng, X., & Yan, B. B. (2010). The differences of well-being between the east and the west: from the view of self-construal. [幸福感的中西差异: 自我建构的视角.]. *Advances in Psychological Science, 18*, 1041-1045.
- Goodman, R. (2005). *Strengths and Difficulties Questionnaire* (Chinese version). Retrieved on 15<sup>th</sup> October 2015 from: <http://www.sdqinfo.com/py/sdqinfo/b3.py?language=Chinese>
- Green, H., McGinnity, A., Meltzer, H., Ford, T., & Goodman, R. (2005). *Mental health of children and young people in Great Britain, 2004*. London: Office of National Statistics.
- Hallam, S. (2009). An evaluation of the Social and Emotional Aspects of Learning (SEAL) programme: promoting positive behaviour, effective learning and wellbeing in primary school children. *Oxford Review of Education, 35*, 313-330.
- Hancock, G. R., & Mueller, R. O. (2001). Rethinking construct reliability within latent variable systems. In R. Cudeck, S. D. Toit, & D. Soerboom (Eds.), *Structural equation modeling: Present and future-A festschrift in honor of Karl Jöreskog* (pp. 195-216). Lincolnwood, IL: Scientific Software International
- Helliwell, J. F., Huang, H., & Wang, S. (2015). The geography of world happiness. In J. F. Helliwell, R. Layard, & J. Sachs (Eds.), *World happiness report*. New York: Sustainable Development Solutions Network
- Hu, J. T. (2007). *Hold high the great banner of socialism with Chinese characteristic and strive for new victories in building a moderate prosperous society in all respects*. [高举中国特色社会主义伟大旗帜为夺取全面建设小康社会新胜利而奋斗]. Beijing: People's Press
- Kam, C.-M., Greenberg, M. T., & Walls, C. T. (2003). Examining the role of implementation quality in school-based prevention using the PATHS curriculum. *Prevention Science, 4*, 55-63.
- Keyes, C. L. M. (2006). Mental health in the CDS youth: Is America's youth flourishing? *American Journal of Orthopsychiatry, 76*, 395-402.
- KidsMatter. (2013). *KidsMatter: Growing healthy minds*. Retrieved on 16<sup>th</sup> March 2016 from: [https://www.kidsmatter.edu.au/sites/default/files/public/15734%20KM%20Brochure\\_Web.pdf](https://www.kidsmatter.edu.au/sites/default/files/public/15734%20KM%20Brochure_Web.pdf)

- Kuter, K., & Deom, G. (2013). *Status of girls in Indiana 2013*. Retrieved on 16<sup>th</sup> March 2016 from: [http://www.in.gov/icw/files/Status\\_of\\_Girls\\_2013\\_high\\_res.pdf](http://www.in.gov/icw/files/Status_of_Girls_2013_high_res.pdf)
- Layard, R., & Hagell, A. (2015). Healthy young minds: Transforming the mental health of children. In J. F. Helliwell, R. Layard, & J. Sachs (Eds.), *World happiness report* (pp. 106-131). New York: Sustainable Development Solutions Network.
- Lendrum, A., & Humphrey, N. (2015). Translating research knowledge into effective school practice in the field of social and emotional learning. In H. Askill-Williams (Ed.), *Transforming the future of learning with educational research* (pp. 275 -295). Hershey, PA: IGI Global.
- Lendrum, A., Humphrey, N., & Wigelsworth, M. (2013). Social and emotional aspects of learning (SEAL) for secondary schools: implementation difficulties and their implications for school-based mental health promotion. *Child and Adolescent Mental Health, 18*(3), 158–164.
- Li, C. C., & Li, N. (2012). Improving primary and middle school students' sense of well-being by relieving their homework burden [课业减负—提升中小學生幸福感的重要途径]. *Journal of Changchun Normal University (Natural Science), 31*(12), 154-156.
- Li, Z. H. (2005). *The practicality rationality and happy culture* [实用理性与乐感文化]. Beijing: Life Reading New Knowledge Three Unions Press
- Liddle, I., & Carter, G. F. A. (2010). *Emotional and psychological wellbeing in children: The standardisation of the Stirling Children's Wellbeing Scale*. Scotland: Stirling Council Educational Psychology Service.
- Luo, N., & Arndt, J. S. (2010). Curriculum development in modern mainland China. In J. D. Kirylo & A. K. Nauman (Eds.), *Curriculum development: Perspectives from around the world* (pp. 91-101): Association for Childhood Education International
- Shen, W. J. (2015). Cultivation of wellbeing – Initial exploration of the cultivation and evaluation of wellbeing of primary students [幸福的养成—小学生幸福感培养与评价家校合作初探]. *Popular Psychology, 2*, 17-18+35.
- Skrzypiec, G., Askill-Williams, H., Slee, P. T., & Rudzinski, A. (2014). *IB middle years programme (MYP): Student social-emotional well-being and school success practices*. Adelaide: Centre for Student Well-being and Prevention of Violence, Flinders University
- Sun, J., Dunne, M. P., & Hou, X.-Y. (2012). Academic stress among adolescents in China. *Australasian Epidemiologist, 19*(1), 9-12.
- UN. (2015). Millenium Development Goals 2015: United Nations. Retrieved on 19<sup>th</sup> March 2016 from: <http://www.unmillenniumproject.org/goals/>
- Venning, A., Wilson, A., Kettler, L., & Elliott, J. (2012). Mental health among youth in South Australia: A survey of flourishing, languishing, struggling, and floundering. *Australian Psychologist, 48*, 299–310.
- Wei, K. (2014). *Copying the long Chinese school day could have unintended consequences. The Conversation*. Retrieved on 16<sup>th</sup> March 2016 from: <http://theconversation.com/copying-the-long-chinese-school-day-could-have-unintended-consequences-23398>



- WHO. (2014). *Mental health: strengthening our response*. Fact sheet N°220. Retrieved on 19<sup>th</sup> March 2016 from: <http://www.who.int/mediacentre/factsheets/fs220/en/index.html>
- Zeng, H., & Guo, S. P. (2012). “Le”: The Chinese subject wellbeing and the view of happiness in China traditional culture. [“乐”—中国人的主观幸福感与传统文化中的幸福观.]. *Acta Psychologica Sinica*, 44(7), 986-994.
- Zhang, Y. H. (2012). Exploration and analysis of the “four autonomous” in promoting wellbeing of primary and secondary students [提升中小學生幸福感的“四自”探析]. *Mental Health Education in Primary and Secondary School*, 18, 36-37.