

# **Ecological Levels of Social and Emotional Wellbeing of Young People**

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**Abstract** This paper reports on the social and emotional well-being (SEWB) of 66,767 young people (grades 2–12) in Australia enrolled in 404 government/state, independent and Catholic schools who completed the ACER Social-Emotional Well-Being Surveys between 2003 and 2014. Based on the Rasch measurement methodology, an ecological model of SEWB was described on a continuum on which five qualitatively distinct SEWB levels were identified: Low, Emerging, Developing, Highly Developed and Very Highly Developed. Details of the different aspects of the external (school, home and community) and internal strengths (social, emotional, learning skills; values) as well as the feelings and behaviors that characterize each level of SEWB are described. Implications of these findings for program planning for young people with mental health problems and recommendations for future research conclude the paper.

Keywords Social and emotional well-being · Measurement · Ecology

The promotion of the social and emotional wellbeing (SEWB) of young people continues to be a concern of federal government policy (e.g., AIHW 2012; MCEEYTA 2008). And policy is increasingly being guided by research that identifies facilitators and barriers to the happiness and wellbeing of children and adolescents. (e.g., ARACY 2008; Forgeard et al. 2011). Measurement of SEWB enables government to monitor policies and programs aimed at supporting its development. Social and emotional wellbeing is of additional interest to those concerned with school

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improvement and educational outcomes as research provides strong empirical evidence for the positive impact of young people's wellbeing on academic achievement (e.g., Charvat 2008; Durlak et al. 2011).

Over the years, the definition of social and emotional wellbeing has shifted from being focused on the absence of mental health disorders (anxiety, depression, ADHD, conduct disorders) to a study of positive emotional functioning and to an examination of the strengths in young people who display extremely high levels of wellbeing (flourishing) (e.g., Kern et al. 2015). Examples of positive aspects of wellbeing studied in younger populations include life satisfaction (e.g., Huebner 1991), happiness (e.g., Holder 2012), positive emotions (e.g., Laurent et al. 1999), gratitude (e.g., Froh et al. 2011), hope (e.g., Martin-Krumm et al. 2015), engagement (e.g., Appleton et al. 2006) and character strengths (e.g., Park and Peterson 2006).

# 1 Conceptualizing and Measuring SEWB in Young People

Broadly speaking, social and emotional wellbeing refers to the way a person thinks and feels about themselves and others. It includes being able to adapt and deal with daily challenges (resilience and coping skills) while leading a fulfilling life.... Social and emotional wellbeing incorporates both the individual characteristics of the child, and those of environments such as families, schools and communities. (AIHW 2012).

Theories of SEWB development are diverse (e.g., Ben-Arieh 2006) with its conceptualization having considerably broadened from a uni-dimensional (e.g., life satisfaction) to a multi-dimensional construct. For example, an ecological conception of SEWB (e.g., Bronfenbrenner and Morris 2006) encompasses not only the intraindividual and interpersonal characteristics of young people but also environmental context of family, school and community (e.g., Benson et al. 2011). A positive psychology-based SEWB model, (e.g., Seligman, 2011) emphasizes the internal and interpersonal dimensions of positive feelings, engagement, relationships, meaningful activity and accomplishment.

Due to the large number of theoretical frameworks that explain social-emotional wellbeing, there is little agreement on how best to measure it. Examples of surveys used to measure SEWB of young people include those surveys that measure positive and negative indicators of children's wellbeing (e.g., Goodman 2001, *The Strengths & Difficulties Questionnaire*), whole-child, health-related quality of life surveys (e.g., Bevans et al. 2010, *Healthy Pathways;* Ravens-Sieberer et al. 2001, *KIDSCREEN-52*), those that address intrinsic and extrinsic factors that moderate mental health and wellbeing in young people (e.g., Benson, et al. *Developmental Assets*) and those that measure dimensions of flourising (e.g., Kern, et al. 2014, *EPOCH*). Factor analysis has often been employed to confirm the conceptual model and dimensions of SEWB utilized by the developers of specific SEWB surveys (e.g., Benson and Scales 2014; Bevans et al. 2010; Giannakopoulous, et al. 2009; Taliep and Florence 2012).

# 2 Wellbeing of Young People: Research

Research concerning the SEWB of young people that has particular relevance to the present study has sought to answer questions concern the extent to which an ecological conception of SEWB is valid. Its focus is on the measurement of different levels as SEWB as found in an earlier study by the author (Bernard 2008), gender differences in indicators of SEWB, developmental differences in SEWB and the extent to which indicators of the SEWB of young people have changed over the past several decades.

Research has lent support for the ecological nature of the SEWB of young people (Bernard et al. 2007). An example is the extensive empirical validation of the framework of developmental assets (e.g., Benson 2006) that indicates positive relationships of young people's external assets (support, empowerment, boundaries and expectations, constructive use of time) and internal assets (commitment to learning, positive values, social competencies, positive identity) to school success, low risk behaviors, and socially-valued outcomes including pro-social behavior, leadership, and resilience. This body of research reveals that the more developmental assets young people experience, the better off they tend to be, that the asset framework appears to have comparable validity across young people's gender, race/ethnicity, geographic residence, and socioeconomic background and that particular clusters of assets are especially influential predictors of various outcomes, both concurrently and longitudinally (Benson et al. 2011).

# **3 Present Study: Rationale and Instrumentation**

This research explores how an ecological conception of social and emotional wellbeing (encompassing intra-individual, interpersonal and environmental aspects of SEWB) translates into a measurement scale and how Rasch measurement methodology (e.g., Bond and Fox 2007) enables researchers to generate empirically-derived conceptions of different levels of SEWB in children and adolescents. This study extends preliminary findings (Bernard 2008; Bernard et al. 2007) that 'discovered' qualitatively distinct levels of SEWB.

The instruments used to collect data for this study are the *Social and Emotional Wellbeing Survey* (SEWB Survey) (Bernard 2003) administered by the Australian Council for Educational Research (ACER) from 2003 to 2007 and the revised SEWB Survey administered from 2008 onwards to incorporate a set of new items (indicators of SEWB) representing aspects of SEWB that research from the field of positive psychology and character strengths found to characterize young people who flourish (curiosity, love of learning, enthusiasm and energy) (Park and Peterson 2006).

The SEWB Survey is based on an ecological conception of SEWB organized in three domains and seven aspects (see Fig. 1). A detailed justification of the research supporting each domain and aspect is beyond the brief of this paper (see Bernard et al. 2007, for a review since up-dated).

Domain 1: Feelings and Behaviors. Research indicates that an important aspect of the SEWB of young people is the extent to which they experience both positive emotions and behaviors (e.g., happiness, positive self-identity, gets along with a

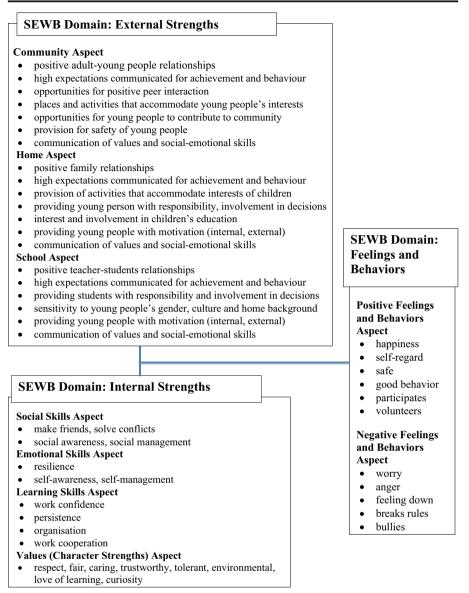


Fig. 1 Ecological framework depicting three domains of young people's SEWB

variety of people) and negative emotions and behaviors (e.g., anger, stress, rulebreaking behavior).

Domain 2: Internal Strengths. Research from the field of social-emotional learning indicates that self-awareness and self-management of social, emotional and learning skills contributes to optimum functioning (e.g., Durlak et al. 2011). Research reveals that values (e.g., Lovat et al. 2010) including character strengths (e.g., Toner et al. 2012) are associated with a wide variety of SEWB outcomes.

Domain 3: External Strengths. Research indicates that positive parenting practices including parent calmness, positive parent-child relationships, parent" authoritative" style, parental interest in their children's education and the extent to which parents encourage social-emotional skills and values strengthens their children's SEWB. Research shows that the experience of young people in school including their relationship with teachers and peers, teacher expectations for achievement and behavior, the extent of involvement in activities that accommodate the interests of young people, the involvement of young people, having a 'say' in the making of school rules and planning activities and the effectiveness of teachers in developing the social, emotional learning skills and values contributes to the overall SEWB of young people. An additional ecological aspect that research indicates contributes to SEWB is community and involves the extent to which young people experience adults who support and care, have opportunities to participate in activities and programs that accommodate their interests, whether or not they have an opportunity to be involved in efforts to make their community and better place and whether or not they have a peer group that works hard and behaves well.

Respondents answer each survey item using a four-point Likert scale: strongly disagree, disagree, agree, strongly agree. These four points represent the strength of each indicator in the subjective experience of a young person. The structure of the survey plus examples of items appears in Table 1.

Table 1 Items from the social-emotional wellbeing surveys

SEWB Domain: Feelings and Behaviors (18 item indicators)					
Aspect 1: Positive Feelings and Behaviors (9 item indicators)					
Ex: I am a happy person. I get along pretty well with members of my family.					
Aspect 2: Negative Feelings and Behaviors (9 item indicators)					
Ex: I feel very stressed. I get into too much trouble.					
SEWB Domain: Internal Strengths (28 item indicators)					
Aspect 3: Social Skills (5 item indicators)					
Ex: I know how to make friends.					
Aspect 4: Emotional Skills (6 item indicators)					
Ex: I have a hard time controlling how worried I get.					
Aspect 5: Learning Skills (8 item indicators)					
Ex: I am confident when doing difficult schoolwork.					
Aspect 6: Values (9 item indicators)					
Ex: I think it is important to treat others including others from different cultural backgrounds with respect.					
SEWB Domain: External Strengths (30 item indicators)					
Aspect 7: Home (13 item indicators)					
Ex: At home, I feel accepted for who I am.					
Aspect 8: School (12 item indicators)					
Ex: At school, I am learning about different feelings and how to cope with stress.					
Aspect 9: Community (5 item indicators)					
Ex: There are lots of after-school activities I can do on weekends (sport, music, art, hobbies) that interest me.					

# **4 Research Questions**

- 1. Can the SEWB of young people be described at different levels incorporating aspects of an ecological conception of SEWB? Which indicators (items) of SEWB characterize the different levels of SEWB of young people?
- 2. Which items of the SEWB survey distinguish young people at the optimal level of SEWB?

# 5 Sample

In 2003, the Australian Council for Educational Research (ACER) published a set of social and emotional well-being (SEWB) survey instruments (Bernard 2003). They were designed to measure different aspects of the SEWB of young people enrolled in primary and secondary schools. The instruments are:

- Social and Emotional Well-Being Survey (Student Form, Years 2-4)
- Social and Emotional Well-Being Survey (Student Form, Years 5–12)
- Survey of Young Children's Social and Emotional Well-Being (Teacher Form, pre-Year 2)
- Social and Emotional Well-Being Survey (Teacher Form, Years 2–12).

This paper deals with the two SEWB self-report surveys for young people. The years 2–4 SEWB Survey containing 53 items asked young people to make judgments about indicators of their own social and emotional well-being. Young people were asked responded agree or disagree. The SEWB Survey completed by young people in years 5–12 containing 94 items included an additional set of questions that asked young people to make judgments about aspects of their school, home and community that influence their emotional well-being, relationships with others, and school achievement. Young people responded on a four-point scale: strongly disagree, disagree, agree and strongly agree.

The data were divided into three groups.

- 1. 2003–2008 using the original SEWB Surveys
- 2. 2009–2012 using modified SEWB Surveys containing four new items with four poorer performing items dropped
- 3. 2013–2014 with online administration of the SEWB Surveys

The 404 participating schools (government/state =58%; Independent =21%; Catholic =21%) across all seven states in Australia and their students were not randomly selected. Participating schools were those that elected to purchase a batch of surveys covering those grade levels of students whose social-emotional wellbeing they wished to survey. Paper-and-pencil SEWB Surveys (2003–2012) and on-line surveys (2013– 2014) were processed by ACER and a Social-Emotional Wellbeing Report was provided to each participating schools that summarized findings including comparing the social-emotional wellbeing of a school's participating students with national averages. A large number of schools across all states participated with a greater number of schools representing middle and upper socio-economic levels. As such, percentages of young people at different levels of SEWB obtained from the current study's findings should not be generalized Australia-wide. Concern in this study was mainly to validate through use of Rasch measurement methodology that the ACER SEWB Surveys are valid measures of SEWB of young people as well as to identify the existence of levels of SEWB.

The sample independence property of the Rasch model (Bond and Fox 2007) allows the results of this study to be valid even if we are not dealing with a representative sample of the population of Australian young people. A representative sample is not required for the location of item thresholds and, therefore, of SEWB levels on the Rasch scale. Assuming a satisfactory fit of the data to the Rasch model, a different sample, or the whole population would provide the same item locations within error as the ACER sample whose data were used in our analysis. No claim is made that the proportions of students in each level would be representative of the population from which the ACER sample was drawn.

Table 2 shows the number of young people from which data were collected every year with the two surveys.

In 2015, all the data collected from students between 2003 and 2014 were analyzed to review the classification of items (indicators) in domains and aspects of SEWB and the description of levels, and to examine trends in item endorsement over a 12-year period. Responses to items on the SEWB Survey 5–12 items are on a four point disagreement-agreement scale and were not dichotomized, as in the 2006 study, in order to extract as much information as possible from the data. However collapsing of categories, as suggested by the analysis of fit for each item, was necessary. For the new surveys, a few items were deleted to eliminate duplications and serious misfits.

Year	Grades 2-4 SEWB survey		Grades 5-12 SEWB survey	
	Male	Female	Male	Female
2003	519	527	350	352
2004	697	636	2682	1182
2005	867	921	1808	1510
2006	241	272	401	306
2007	400	347	689	517
2008	363	398	445	577
2009	325	331	579	911
2010	873	1154	2502	2189
2011	244	427	949	1420
2012	646	857	1358	1665
2013	1398	1297	1728	2889
2014	7431	6885	5366	6336
Total	14,004	14,052	18,857	19,854

Table 2 Number of students for each SEWB survey by year and gender

The total number of students who completed a SEWB survey is 66,767

# 6 Introduction to Rasch Methodology

As a result of the application of Rasch measurement methods to the data collected from the SEWB surveys, it is now possible to qualitatively describe levels of the social and emotional wellbeing of young people (grades 2–12).

Young people with high levels of SEWB are located high on the scale, while students with lower levels of SEWB are located lower on the scale. The greater the agreement scores of a young person on the items in a survey, the higher the level of his/ her SEWB (negatively worded items are reverse scored). The highly endorsed items are located low on the scale. These are items that even young people with low levels of SEWB are likely to endorse. The items that are higher on the scale are items that are likely to be endorsed by young people at high levels of SEWB but not by young people at lower levels.

A thorough analysis of fit of the data to the model at the item level using statistical indicators (Point Biserial Correlations, Infit statistics and mean category abilities (Bond and Fox 2007), Differential Item Functioning and graphical displays (Item Characteristic Curves) confirmed that all items in both SEWB surveys measure the same construct to a large extent and that requirements of measurement for the construction of a single scale are satisfactorily met. For each item, observed proportions of agreement for various SEWB score groups have been compared to proportions predicted by the model and a remarkable fit of the data to the measurement model assured that a single construct of "Social and Emotional Wellbeing" of young people has been measured by both surveys. The Cronbach alpha reliabilities of both surveys (of the order of 0.9) are most satisfactory.

The location of items along the scale following a thorough analysis of item fit makes a calibrated bank of SEWB items. Items scored agree/disagree appear with a single location on the scale while items with categories of various agreement/disagreement strengths appear with more than one location on the scale in terms of thresholds between adjacent categories: one threshold for items with two categories, two thresholds for items with three categories, etc. The agreement categories that are located along the scale show the agreement strength with which an item operates at various locations along the scale and consequently in each SEWB level.

The location of items along the scale following the analysis of fit makes a calibrated bank of SEWB items. Items scored disagree or agree appear once on the scale while items with more categories of disagreement/agreement appear more than once in different locations on the scale in terms of thresholds between adjacent categories. One threshold appears for items with two categories, two thresholds for items with three categories, etc. The agreement categories that are located along the scale show the agreement strength with which an item operates at various locations along the scale.

A detailed examination of thresholds along the scale and the items to which they belong allowed qualitative descriptions of regions along the scale, called levels. This examination was initially done for the items of each SEWB aspect. Thus levels for each aspect were identified and qualitatively described making sure the description of each level was linked to adjacent levels. Following this operation, each SEWB level along the scale was described in terms of the information provided by the levels of each SEWB aspect.

# 7 Results

1. Can the SEWB of young people be described at different levels incorporating aspects of an ecological conception of SEWB (2013/2014 data)? Which indicators (items) of SEWB characterize the different levels of SEWB of young people?

A Rasch measurement scale has been constructed with the student survey data. Both students and items are located on the SEWB scale: students with high SEWB and items with low proportion of agreeable respondents are located high on the scale. It is equally probable for a student to agree or disagree with an item that is located at the same place on the scale. This student is more likely to agree with items below and more likely to disagree with items above. This can be said for any student who has been measured on the SEWB scale. Students with high SEWB are equally likely to agree or disagree with items for which the proportion of agreeable respondents is low (both students and items are located high on the scale). Students with low SEWB are equally likely to agree or disagree or disagree with items for which the proportion of agreeable respondents is high (both students and items are located low on the scale).

A SEWB level is a region of the scale that can be described qualitatively based on the thresholds and agreement categories of the items that are located in this region. A graphical display shows the five SEWB levels obtained from the analysis of the data (see Fig. 2 below).

The distribution of the students may be shifted along the scale to a selected probability value for reporting purposes. Thus the number of students in a level depends on the selected probability for these students to agree with the items in this level.

The probability with which the number of students in each level was shown in the ASG report (2007) was 0.8 (the probability of agreeing with the items in a region for students measured in this region is 0.8, which means very likely). Table 3 below shows the percentage of students in each SEWB level with probabilities of 0.8 and 0.5. The probability for agreeing with a statement corresponding to p = 0.5 is the same as the probability for disagreeing. It is for this reason that a *p* value greater than 0.5 is usually selected between 0.6 and 0.8.

The qualitative analysis using the location of item thresholds described above enabled a description of each of the five levels in terms of the different domains and aspects of SEWB represented in the ecological framework (see Table 4). There was a great deal of correspondence as to the level location of similarly worded items that appeared in both surveys. As such, one common set of descriptions has been written representing both surveys. In the written descriptions, those items in the survey for young people in grades 2–4 that did not match item categories for the survey for young people in grades 5–12 have been noted. It is also recognized that no items were contained in the survey for young people in grades 2–4 that measured the SEB Domain of "External Strengths" – items written to describe community, school and home aspects. Therefore, written descriptions of the External Strengths of community, school and home only apply to young people in grades 5–12. Differences in responses of young people in grades 2–4 from those in upper grades are indicated.

2. Which items of the SEWB survey distinguish young people at the highest evel of SEWB?

Table 5 presents 12 of the 77 items that appear on the SEWB Survey for grades 5–12 that were strongly agreed to by young people at Level 5 (Very Highly Developed) but

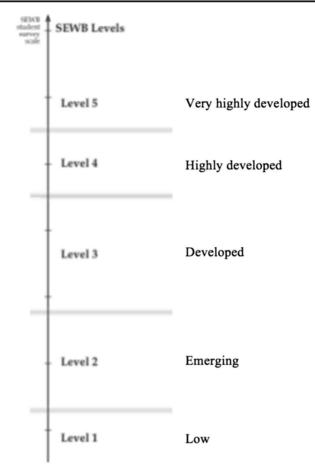


Fig. 2 Levels of SEWB for children and adolescents

not by young people at Level 4 (Highly Developed). (Young people at Level 4 agreed with each item but did not strongly agree).

One recurrent characteristic of young people with highest levels of SEWB is as part of their external strengths, having opportunities to improve school and community life. As well, what goes on at school contributes a lot to the highest level of SEWB. This

<b>Table 3</b> Percentage of students in each SEWB level at $p = 0.8$		Probability	
and $p = 0.5$	SEWB level	0.8	0.5
	5	0.1%	1.0%
	4	3.9%	17.2%
	3	27.1%	59%
	2	53.1%	15%
	1	15.7%	7.8%

#### Table 4 Ecological descriptions of levels of social-emotional wellbeing

#### Level 5: VERY HIGHLY DEVELOPED

#### Aspect 1: Positive Feelings and Behaviors

Young person's emotional life is characterized by an abundance of exceptionally strong positive feelings. Superior relationships exist with teachers, classmates and members of their family. A signature strength is the young person's extremely high level of volunteering to make school and community better and safer.

#### Aspect 2: Negative Feelings and Behaviors

Young person does not experience intense negative feelings for sustained periods of time nor engages in anti-social and self-harming behaviors

#### Aspect 3: Social Skills

Young person has exceptional social skills and pro-social attitudes. The signature strength of a young person with optimal SEWB is that s/he is exceptionally good at solving problems without fighting.

#### Aspect 4: Emotional Skills

Young person has outstanding emotional competencies and superior coping skills. When faced with adversity (e.g., rejection, failure, poor body image), demonstrates an outstanding degree of self-acceptance. The signature strength is that s/he is exceptionally good at not only being able to describe how s/he feels but also managing anxiety.

#### Aspect 5: Learning Skills

When doing challenging and difficult schoolwork, young person applies a wide range of exceptional learning skills and positive attitudes towards themselves and school. The two signature strengths that distinguish a young person are more advanced skills in working cooperatively with others as well as in planning time.

#### Aspect 6: Values

Young person possesses an exceptionally well-established set of values and character strengths that contribute to outstanding character development.

## Aspect 7: Home

Young person's parents display an exceptionally well-developed "authoritative" style of parenting (e.g., firm and kind). Their parents demonstrate an advanced level of emotionally intelligent parenting (e.g., listen and talk about feelings and how to manage stress, make friends) and are always interested in their children's education. They always accept their children no matter what, spend quality time and involve them in decisions.

#### Aspect 8: School

Young person's teachers are perceived as stronger in a number of positive teaching practices than the teachers of students at lower levels including: spending time talking about making friends, managing different feelings, discussing learning skills and s/he has more frequent opportunities for discussing how to make school a better place. A signature strength of a young person is learning a great deal from their teachers about feelings, how to cope with stress, how to make friends, solve problems and advanced learning skills).

#### Aspect 9: Community

Young person experiences people in his/her community as being exceptionally supportive, caring and reinforcing. Explicit boundaries, shared values and high expectations are exceptionally strong. The signature strength of community experience for these young people is the extent to which their peers work hard and behave well.

# Level 4: HIGHLY DEVELOPED

Aspect 1: Positive Feelings and Behaviors

Young person now experiences significantly more frequent positive emotions than at lower levels including high levels of happiness, liking the kind of person they are feeling free from danger. As well, s/he experiences demonstrates a much greater range of positive behaviors than lower levels including getting along with classmates and teachers, participating in a wide variety of activities, participating in a wide range of activities and beginning to volunteer.

Aspect 2: Negative Feelings and Behaviors

Young person rarely experiences negative emotions including now not losing temper a lot and many fewer negative behaviors (being quite mean, under-achievement). At Upper level 5, s/he no longer experiences repeated episodes of feeling very stressed.

#### Aspect 3: Social Skills

Young person now has strengthened his/her social skills that are seen developing at Level 3 (making friends, not doing things to hurt other's feelings) as well as now displays more pro-social attitudes (conscientiousness in following rules; tolerance of others who do the wrong thing).

#### Aspect 4: Emotional Skills

Young person displays more advanced social skills including greater strengths than a young person at Level 3 in empathy and impulse control. S/he further demonstrates stress management skills (finding someone to talk to).

## Aspect 5: Learning Skills

When doing challenging and difficult schoolwork, young person displays more highly developed learning skills and attitudes (confidence, organization, goal orientation) including compared to Level 3 greater persistence, work cooperation time planning and less frequent self-depreciation for learning mistakes and failures.

Grades 2–4: At upper Level 2, self-deprecation for poor learning outcomes begins to lessen and confidence and time planning emerging.

## Aspect 6: Values

A young person's values (caring for people, environmental concern, fairness, enthusiasm-energy, love of learning) continue to strengthen from Level 3's level of development. Significant further growth is observed in the values of helping people with problems, caring about the environment, fairness, enthusiasm, curiosity and at upper Level 4, the love of learning.

#### Aspect 7: Home

A young person experiences more highly developed parenting skills than a young person at Level 3 including having a parent who shows greater interest in him/her including asking a lot of questions about what young person is learning at school, who discusses more frequently what is acceptable behavior and consequences, who often involves young person in family decision making and who effectively discusses feelings, how to cope with stress, important values and learning skills.

#### Aspect 8: School

Young person perceives teachers as more effective than at lower levels in managing the classroom (discuss school rules, praise behavior, communicate expectations, try hard to help and be nice). Teachers are also now perceived as beginning to give students a voice in classroom decision making including how to make school a better place as well as providing more activities of interest.

### Aspect 9: Community

A young person now experiences greater frequency and quality of positive engagement with peers, adults, and after-school activities than a young person who is at Level 3. What is noticeable stronger are the presence of one or more adults outside of school and family who offer praise for positive behavior.

## Level 3: DEVELOPED

Aspect 1: Positive Feelings and Behaviors

Young person experiences stronger positive feelings (happiness, liking self, safe) than a young person at Level 2. However, positive behaviors are yet to be extensively in evidence (getting along with classmates, teachers, participating, volunteering). The exception is seen in the development of positive relationships at home.

#### Aspect 2: Negative Feelings and Behaviors

Young person is a little less likely to lose his/her temper as well as under-achieve that a young person at Level 2. At upper Level 3, young person begins to experience much less loneliness, stress and feeling down.

# Aspect 3: Social Skills

A young person's social skills are more developed (solving problems without fighting) and pro-social attitudes (accepts having to behave well and follow rules, tolerant of people). Signature developments in

social skills and pro-social attitudes include knowing how to make new friends, solving problems without fighting and being much more tolerant of having to live by the rules and of people.

## Aspect 4: Emotional Skills

A young person's emotional skills have now begun to develop including being able to describe feelings, finding someone to talk to when stressed and shows evidence of anxiety management.

# Aspect 5: Learning Skills

A young person has now developed many more learning skills and positive attitudes towards learning than a young person at a lower level. At this level, a young person almost always wants to do his/her best in schoolwork, thinks he/she has what it takes to be successful, is confident when doing difficult schoolwork, plans time and avoids self-depreciation when doing badly in schoolwork.

#### Aspect 6: Values

Many values needed for good character have now been developed (respect, helping others, caring, fairness, curiosity) with trustworthiness being most highly developed. Optimism for the future strengthens at upper Level 3.

## Aspect 7: Home

Young person now experiences a greater range of positive parenting practices than a young person at Level 2 including having a parent who praises him/her, having a 'say' about decisions at home and feeling accepted. At upper Level 3, a young person experiences more frequently parenting practices including having parents who make time to listen, effectively discuss the importance of doing one's best in school, talk about important values and discuss the importance of different learning skills (confidence, persistence, organization).

# Aspect 8: School

Young person now experiences many more positive teaching practices in comparison with a young person at Level 2 including having a teacher who discusses school rules and consequences, who reminds students do their best in schoolwork, who spends time discussing how to make friends, manage stress and ways to be confident, persistent and organized when doing schoolwork as well as having many different interesting activities to do at school.

# Aspect 9: Community

In comparison with those at lower levels of SEWB, young person now experiences community support including connectedness to positive peers as well adults who communicate high expectations for behavior and provide acknowledgement when the young person does the right thing and accomplishes something. A young person now has lots of activities to do after school and on weekends including volunteering to help others.

# Level 2: EMERGING

Aspect 1: Positive Feelings and Behaviors

Young person experiences some positive feelings such as feeling safe and free from danger as well as liking the kind of person he/she is. Happiness is only experienced occasionally. At upper Level 2, young person begins to consolidate feelings of belonging at school. The following positive behaviors are emerging though not as yet consolidating: getting along with family, classmates and teachers, volunteering and participating in different activities.

Grades 2-4: At upper Level 2, gets along well with his/her teacher.

Aspect 2: Negative Feelings and Behaviors

Young person experiences less extreme loneliness. Lower levels of feeling down in evidence at upper Level 2. Frequent anger still exists as well as under-achievement. Staying out of trouble emerges at Level 2 as well as not being mean to others. In later primary and secondary years, alcohol and drug avoidance consolidates at upper Level 2.

Grades 2-4: At upper Level 2, young person loses his/her temper less and does not feel bad for long periods of time.

Aspect 3: Social Skills

Many social skills of a young person are emerging including early stages of knowing how to make friends, solve problems without fighting as well as making an effort to avoid doing or saying things that

deliberately hurt other people's feelings. And it is at upper Level 2 that a young person displays some tolerance of frustration and tolerance of others.

# Aspect 4: Emotional Skills

Some emotional skills of a young person are emerging such as the ability to understand how someone else is feeling and thinking before acting. There is less of a tendency to take things personally. Other emotional skills are yet to emerge such as finding someone to talk with when upset.

Grades 2–4: At upper Level 2 emotional awareness and self-management begins to emerge. A young person is less inclined towards self-depreciation. He/she begins to utilize a range of self-management skills for calming down when stressed (playing, running, talking to someone).

#### Aspect 5: Learning Skills

Most learning skills and positive attitudes towards learning of a young person have not emerged as yet including wanting to his/her best in school and being confident when doing difficult schoolwork. Others are consolidating at upper Level 2 including persistence and working cooperatively. A young person is rarely confident when doing schoolwork that is difficult and under-achieves. At upper Level 2, a lessening of self-depreciation for poor schoolwork emerges.

### Aspect 6: Values

Values are now at various levels of emergence and consolidation. Some are occasionally being displayed (helping people with problems, caring about environment), while others are usually displayed (treating others with respect, hopeful about the future) and some are almost always in evidence (e.g., trustworthiness). At upper Level 2, a young person is likely to display fairness, love of learning and curiosity.

#### Aspect 7: Home

A young person grows up in a home where s/he perceives some parent effectiveness skills including parents who usually are interested in their education, communicate expectations for behavior, discuss values and some social-emotional skills. Discussion of how to manage stress and make friends is infrequent. Communication of home rules and praise for positive behavior is infrequent. A young person at upper Level 2 perceives greater parenting strengths than a young person at lower Level 2.

#### Aspect 8: School

Young person perceives greater support and structure than a young person at the lowest SEWB level. His/ her teachers communicate high expectations for doing his/her best, school rules and consequences are discussed. Teachers are usually trying hard to be helpful and nice. However, a young person is not learning how to manage their emotions, behaviors and learning as well as about values. Intrinsic motivational teaching practices are perceived as occurring occasionally.

### Aspect 9: Community

Young person perceives that that his/her engagement with positive people (adults, peers) and youthoriented programs (sport, music, arts, hobbies) is more frequent than young people report at Level 1, but it is, nonetheless, occasional.

#### Level 1: LOW

Aspect 1: Positive Feelings and Behaviors

Young person rarely experiences positive feelings (does not: feel happy, feel safe, feel like s/he belongs at school, likes him/herself) and does not get along with members of his/her family, teachers and peers.

Grades 2-4: At upper Level 1, happiness and self-regard begins to emerge.

#### Aspect 2: Negative Feelings and Behaviors

Young person frequently experience many different intense, negative feelings (loses temper, feels lonely, feels down and depressed, feels very stressed) and frequently engages in many negative behaviors (mean to others, rule breaking, under-achievement, uses alcohol and takes drugs –in older young person).

Grades 2-4: At upper Level 3, under-achievement is less frequent.

Aspect 3: Social Skills

Young person has poorly developed social skills including not knowing how to make friends and almost never solves problems without fighting. S/he rarely tries to control him/herself from saying or doing

things that hurt the feelings of other people. Young person demonstrates extremely high frustration intolerance and low self-control when faced with expectations and rules for behavior.

Grades 2–4: At upper Level 1, young person begins to demonstrate some social skills including following rules, fairness and not hurting people's feelings.

#### Aspect 4: Emotional Skills

When faced with adversity, young person is almost never able to control negative feelings (anger, worry, feeling down) rarely using emotional and behavioral regulation skills such as finding someone to talk to get support (resilience). Young person almost always puts him/herself down and acts without thinking first.

## Aspect 5: Learning Skills

When doing challenging and difficult schoolwork, young person almost never demonstrates learning skills and positive attitudes towards themselves and school that are needed for them to achieve to their potential. Young person almost never wants to do his/her best at schoolwork and is almost never confident, persistent, organized nor works well with others.

#### Aspect 6: Values

A young person does not hold values associated with the development of good character (e.g., respect, care for others, trustworthiness, fairness). Moreover, s/he has not as yet developed character strengths (e.g., love of learning, curiosity, enthusiasm-energy, optimism about future). At upper level 1, young person begins to appreciate values (e.g., helping others, trustworthiness,).

Grades 2-4: At upper Level 1, the love of learning and curiosity is being to emerge.

#### Aspect 7: Home

Young person perceives that his/her parents have under-developed parenting skills including an absence of discussion of values, social-emotional skills, communication of high expectations, interest in his/her education and warmth.

## Aspect 8: School

Young person perceives that his/her interactions with teachers much less positively than young people at higher levels of SEWB some of who may have the same teachers. Young person is likely to be significantly disengaged from the support, opportunities and relationships that are on offer at school.

#### Aspect 9: Community

Young person perceives that s/he lives in a community where s/he is very infrequently engaged with positive people (peers, adults), opportunities, programs and experiences.

#### Table 5 Items that distinguish young people with very highly developed SEWB

I volunteer to do things to make my school and community safer and better.

I am good at solving problems without fighting.

I (do not) have a hard time controlling how worried I get.

It is (not) hard for me to describe how I feel deep down.

In school, we spend time learning how to make friends and solve problems.

Teachers discuss ways I can be confident, persistent and organized in doing my schoolwork.

In school, I am learning about different feelings people have and how to cope with stress.

At my school, students have different opportunities for discussing how they can make school a better and safer place to be.

Where I live, adults make opportunities available for young people to do things that make their community a better place to live (volunteer youth representatives on committees).

My friends work hard and behave well.

takes the form of teachers discussing issues related to personal development including how to make friends, manage stress and ways to be confident persistent and organized when doing schoolwork. Additionally, they surround themselves with peers who behave well and work very hard. In terms of internal strengths, the distinguishing indicator that contributes most to SEWB is the ability to describe and manage anxiety and to solve conflicts peacefully.

# 8 Discussion

Of central interest in the present research was whether the social-emotional wellbeing (SEWB) of young people can be described at different levels incorporating aspects of an ecological conception of SEWB. Results conforms previous findings by the authors (Bernard et al. 2007) that a continuum of young people's SEWB exists with distinct levels emerging from the Rasch analysis: low, emerging, developing, highly developed, very highly developed. Previous research by Keyes (2002) with adults found a three-level continuum of mental health (languishing, moderately mentally healthy, flourishing). Consistent with previous research (e.g., Benson and Scales 2014; Bronfenbrenner and Morris 2006), both external and internal strengths of young people contribute to the construct of SEWB. No one aspect of either the SEWB Domain of External or Internal Strengths (see Fig. 1) stood out as the main contributor to the construct of SEWB. This is because for the SEWB Domain of External Strengths, community, home and school aspects all contributed to the construct in roughly similar degrees of contribution. For example, young people who judged their homes as providing strong support and effectiveness, also perceived their school and community as contributing similar degrees of support and effectiveness. And for the SEWB Domain of Internal Strengths, the four aspects (social, emotional, example, low levels of one of the internal strengths were accompanied by low levels in the other three aspects. Similar relationships were found for the two aspects of the SEWB Domain, Feelings and behaviors.

The finding of different SEWB levels is distinctive adding to our understanding of higher levels of SEWB in various ways. Young people whose SEWB is highly developed and optimal differ from other young people in an important way; namely, they more strongly endorse ("strongly agree") positive indicators of SEWB (e.g., "I am a happy person") than young people at lower SEWB levels who merely endorse ("agree") the same items. They also more strongly reject negative indicators of SEWB (e.g., being quite mean; under-achieving). This finding adds to an ecological understanding of young people's SEWB; namely, that intrinsic and extrinsic factors vary in strength – and a young person's level of SEWB depends not on the mere existence of an intrinsic factor (e.g., strong vs. very strong).

Research question 2 concerning which items of the SEWB survey distinguish young people at the highest level of SEWB revealed these young people differ in the strength of their endorsement of various SEWB items. As Table 5 reveals, while young people with highly developed SEWB volunteer, young people with very highly developed SEWB have a higher degree of endorsement. In comparison with young people with highly developed SEWB, these young people self-report more highly developed social-emotional skills such as conflict resolution, being able to describe their feelings and

being able to control how worried they get. They also report a higher degree of support from teachers in learning about feelings, learning skills as well as having greater opportunities for contributing to their school and community. Their friends work that much harder and behave well.

The data also reveals interesting differences between young people whose SEWB is low and those young people who have green shoots of SEWB emerging. Young people at a low level of SEWB experience multiple negative emotions and behaviors and few positive emotions and behaviors where those young people who SEWB is emerging indicate some positive feelings such as feeling safe and liking the kind of person s/he is. Young people with lowest SEWB have poorly developed social, emotional and learning skills with some values just beginning to develop at the upper part of this level (e.g., helping others, trustworthiness). In terms of external support for SEWB, whereas the picture of young people at the lowest level, is one of disengagement from positive parents, teachers and positive peers with a perception of significant under-development of best practice parenting and teaching skills, young people whose SEWB is emerging perceive the presence greater parent effectiveness skills and, at school, greater support, structure and expectations communicated. At upper Level 2, young people feel like they belong at school. They also feel less lonely and down. Alcohol and drug use abates at upper Level 2, social skills are now apparent with some emotional skills. Learning skills are yet to emerge.

The SEWB of young people develops at Level 3 and strengthens further at Levels 4 and 5. In contrast to Level 2 (Emerging), they experience stronger positive emotions and behaviors (e.g., happy, feeling safe), fewer negative ones (e.g., under-achievement; losing temper, stress, feeling down) and values (e.g., respect, helping others, optimism). A signature development is the display of many more learning skills and positive attitudes, perhaps, explain the lessening of under-achievement. External support at school, home and community is now developing with a signature development being a perception on the part of young people that their parents and teachers spend time talking to them about life skills (e.g., making friends, managing stress, confidence, persistence). This trend continues upwards at SEWB Level 4, Highly Developed, with young people now experiencing stronger and more frequent positive emotions and behaviors, values, rarely experiencing stress, under-achievement, displaying more prosocial attitudes, stress management skills and greater confidence, organization and goal orientation towards schoolwork. They experience greater support and effectiveness with parents and teachers and are more connected to positive adults, peers and programs.

In conclusion, this research indicates that in helping adults and young people understand the construct of SEWB, an ecological framework is warranted. A focus on intra-individual factors that direct intervention efforts in schools to prevent and promote wellbeing may well miss the mark –especially for those young people who are at lowest levels of SEWB. When planning individual intervention programs for young people who are referred for specific mental health issues (bullying, anxiety, noncompliance, substance abuse), it is vital to consider the extent to which their SEWB is generally well-developed which might warrant an intervention (e.g., cognitivebehavioral therapy) focused on the presenting problem) or if the presenting problem is part of and accompanied by a wide range of poor SEWB indicators warranting a broad-based ecological planned program encompassing modifications to aspects of school, home and community and intra-individual and interpersonal functioning. Future research opportunities include the need to identify more SEWB indicators that contribute to optimal levels of SEWB, whether teacher ratings of SEWB based on the same ecological framework employed in this study validate the current findings as well as the need to obtain validation of the different levels of SEWB using behavioral observations of young people.

# References

- Appleton, J. J., Christenson, S. L., Dongjin, K., & Reschley, A. L. (2006). Measuring cognitive and psychological engagement: Validation of the student engagement instrument. *Journal of School Psychology*, 44, 427–445.
- Australian Institute of Health and Welfare. (2012). Social and emotional wellbeing: development of a children's headline indicator. Cat. No. PHE 158. Canberra: AIHW.
- Australian Research Alliance on Children and Youth. (2008). *Report card on the wellbeing of young Australians, Australian research Alliance on children and*. Canberra: Youth http://www.aracy.org. au/publicationDocuments/REP\_report\_card\_the\_wellbeing\_of\_young\_Australians\_A5.pdf.
- Ben-Arieh, A. (2006). Is the study of the "state of our children" changing? Revisiting after five years. *Children and Youth Services Review*, 28, 799–811.
- Benson, P. L. (2006). All kids are our kids: What communities must do to raise caring and responsible children and adolescents. San Francisco: Jossey-Bass.
- Benson, P. L., & Scales, P. C. (2014). Developmental assets. In R. J. R. Levesque (Ed.), Encyclopedia of adolescence. New York: Springer.
- Benson, P. L., Scales, P. C., & Syvertsen, A. K. (2011). The contribution of the developmental assets framework to positive youth development theory and practice. In R. M. Lerner, J. V. Lerner, & J. B. Benson (Eds.), Advances in child development and behavior (Vol. 41, pp. 197–230). Burlington: Academic Press.
- Bernard, M. E. (2003). The social-emotional well-being surveys (Student Form, Year 2–4; Student Form, Years 5–12; Teacher Form). Camberwell: Australian Council for Educational Research.
- Bernard, M. E. (2008). The social and emotional well-being of Australian children and adolescents: The discovery of "levels." *Proceedings of the Australian Psychological Society Annual Conference*, 43, 41– 45.
- Bernard, M. E., Stephanou, A., & Urbach, D. (2007). The ASG student social and emotional health report. Australian Scholarships Group: Technical Report. Oakleigh.
- Bevans, K. B., Riley, A. W., & Forrest, C. B. (2010). Development of the healthy pathways child-report scales. *Quality of Life Research*, 19, 1195–1214.
- Bond, T., & Fox, M. (2007). Applying the Rasch model. Fundamental measurement in the human sciences (2nd ed.). NJ: Lawrence Erlbaum.
- Bronfenbrenner, U., & Morris, P. (2006). The bio-ecological model of human development. In R. M. Lerner (Ed.), *Handbook of child psychology* (6th ed., pp. 793–828). New Jersey: Wiley.
- Charvat, J. L. (2008). Research on the relationship between mental health and academic achievement. Bethesda Maryland: National Association of School Psychologists http://www.nasponline. org/advocacy/Academic-MentalHealthLinks.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405–432.
- Forgeard, M. J. C., Jayawickreme, E., Kern, M. L., & Seligman, M. E. P. (2011). Doing the right thing: Measuring wellbeing for public policy. *International Journal of Wellbeing*, 79–106. doi:10.5502 /ijw.V1i1.15.
- Froh, J. J., Fan, J., Emmons, R. A., Bono, G., Huebner, E. S., & Watkins, P. (2011). Measuring gratitude in youth: Assessing the psychometric properties of adult gratitude scales in children and adolescents. *Psychological Assessment, 23*, 311–324.
- Giannakopoulos, G., Dimitrakaki, C., Pedeli, X., Kolaitis, G., Rotsika, V., Ravens-Sieberer, U., & Tountas, T. (2009). Adolescents' wellbeing and functioning: relationships with parents' subjective general physical and mental health. *Health Quality Life Outcomes*, 7, 100. doi:10.1186/1477-7525-7-100

- Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire (SDQ). Journal of the American Academy of Child and Adolescent Psychiatry, 40, 1337–1345.
- Holder, M. D. (2012). Happiness in children: measurement, correlates and enhancement of positive subjective well-being. New York: Springer.
- Huebner, E. S. (1991). Initial development of the Students' life satisfaction scale. School Psychology International, 12, 231–240.
- Kem, M.L., Waters, L.E., Adler, A., & White, M. (2014). A multidimensional approach to measuring wellbeing in students: Application of the PERMA framework. *The Journal of Positive Psychology*. doi:10.1080/17439760.2014.936962
- Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2015). A multi-dimensional approach to measuring wellbeing in students: Application of the PERMA framework. *Journal of Positive Psychology*, 10, 262–271.
- Keyes, C. L. (2002). The mental health continuum: From languishing to flourishing in life. Journal of Health and Social Research, 43, 207–222.
- Laurent, J., Catanzaro, S. J., Joiner, T. E., Rudolph, K. D., Potter, K. I., Lambert, S., et al. (1999). A measure of positive and negative affect for children: Scale development and preliminary validation. *Psychological Assessment*, 11, 326–338.
- Lovat, T., Toomey, R., & Clement, N. (2010). International research handbook on values education and student wellbeing. New York: Springer.
- Martin-Krumm, C., Delas, Y., Lafreniere, M., Fenouillet, F., & Lopez, S. (2015). The structure of the state hope scale. *Journal of Positive Psychology*, 10, 272–281.
- Ministerial Council on Education Employment Training and Youth Affairs (2008). Melbourne declaration on educational goals for young Australians, December 2008, ministerial Council on education employment training and youth Affairs, Carlton, Vic. http://www.mceecdya.edu.au/verve/\_resources/National\_ Declaration\_on\_the\_Educational\_Goals\_for\_Young\_Australians.pdf.
- Park, N., & Peterson, C. (2006). Moral competence and character strengths among adolescents: the development and validation of the values in action inventory of strengths for youth. *Journal of Adolescence*, 29, 891–905.
- Ravens-Sieberer, U., Gosch, A., & Abel, T. (2001). Quality of life in children and adolescents: A European public health perspective. *Social Prevention Medicine*, 46, 297–302.
- Seligman, M.E.P. (2011). Flourish : A visionary new understanding of happiness and well-being. New York: Free Press.
- Taliep, N., & Florence, M. (2012). Evaluating the construct validity of the KIDSCREEN-52 quality of life questionnaire within a south African context. South African Journal of Psychology, 42(2), 255–269.
- Toner, E., Haslam, N., Robinson, J., & Williams, P. (2012). Character strengths and wellbeing in adolescence: structure and correlates of the values in action inventory of strengths for children. *Personality and Individual Differences*, 52, 637–642.