Systematic Review of the Measurement Properties of Questionnaires for the Measurement of the Well-Being of Children and Adolescents

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Abstract

The objective of this study was to systematically review the psychometric properties of the measures used in assessing the psychosocial well-being status of children and adolescents. This review updates and expands on the previous review of the literature on child well-being in order to assess all available studies from 2000 to 2013 on the measurement properties of all available well-being assessment instruments that aim to measure the construct of well-being in childhood and adolescence. Overall, 182 measures designed for measuring child and adolescent well-being were found. These measures vary in length and structure from one item scales to multidimensional questionnaires with 70 items and more. Most of the instruments measure positive indicators of well-being (e.g., life satisfaction, quality of life, self-esteem, etc.), others measure deficit indicators (e.g., anxiety, depression, stress, etc.), and a few instruments measure both positive and deficit indicators. In addition, there are some instruments with undefined modality of well-being. Thus, our study has revealed an ongoing theoretical shift from a deficit approach to well-being to a strengths-based approach. The results also indicate that the reliability information is reported for the majority of the instruments. The most frequently used reliability measure for all these instruments is the Cronbach’s alpha internal consistency coefficient. The reports of validity are available for approximately one-third of the instruments. Measures of well-being in adolescence are dominant, however, some instruments are suitable for the measurement of well-being and its indicators in childhood, and some reach the period of emerging adulthood (19-21 years). Most of the studies were conducted in North America and Europe with only a few of them being cross-cultural.

Keywords: Well-Being, Psychometric properties, Children, Adolescents

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The notion of well-being dates back to 1948 when the constitution of the World Health Organization (WHO) defined health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." More recently, there has been a growing interest in the definition and measurement of child well-being which is reflected in the large number of studies carried out across the world (Ben-Arieh & Frønes, 2011; Benson & Scales, 2009; Diener & Seligman, 2004; Frønes, 2007; Pollard and Lee, 2003; Soutter, Gilmore, & O’Steen, 2011). However, inconsistent use of definitions of well-being and the variety
of its indicators and measures have created a confusing and contradictory research base. Despite many decades of research on well-being, there is still little consensus on how it should be measured.

In a systematic review, Tsang, Wong and Lo (2012) identified emerging themes of the constructs of psychosocial well-being and named them Deficit-oriented constructs and Strengths-based constructs. For many decades, the measurement of child well-being has focused on children with emotional and behavioral problems, disorders, and disabilities rather than attempting to measure a continuum of well-being for all children. Well-being mainly has been conceptualized as the absence of negative or undesirable behaviors (Benson, 2003; Bornstein, Davidson, Keyse, Moore, & The Center for Child Well-Being, 2003; Moore & Halle, 2001). This “deficit-oriented approach” involves the use of items that were rationally selected from the measures of clinical diagnoses or problematic symptoms, such as anxiety and depression that predate current conceptual models of psychosocial well-being (Chorpita, Daleiden, Moffitt, Yim, & Unemoto, 2000). However, Ben-Arieh et al. (2001) indicate that focusing on negative indicators skews our collective view of well-being, which is more than just the absence of negatives.

Within the last decade, however, this trend has began to change. Researchers and practitioners began to question the deficit-based approach and move toward a more ecological framework for understanding child well-being (Bronfenbrenner, 1992) or a framework that builds on the concept of children in society (Bennet, 2004), or on the child’s own current perspective and experience (Ben-Arieh, 2006). Rather than focusing on individual weaknesses or mental health problems, proponents of the “strengths-based” approach (Ben-Arieh & Goerge, 2001; Pollard & Lee, 2003) prefer to conceptualize child well-being as a positive continuous variable. Thus, strengths-based assessment is defined as the measurement of those emotional and behavioral skills, competencies, and characteristics that “create a sense of personal accomplishment; contribute to satisfying relationships with family members, peers, and adults; enhance one’s ability to deal with adversity and stress; and promote one’s personal, social, and academic development” (Epstein & Sharma, 1998, p.3).

Ryan and Deci’s (2001) review two broad psychological traditions that have historically been employed to explore well-being. The hedonic view equates well-being with happiness and is often operationalized as the balance between positive and negative affect (Ryan & Deci, 2001; Ryff, 1989), being traditionally associated with the concept of subjective well-being (SWB) (e.g., Diener, 1984). Park (2004) pointed out that “SWB serves not only as a key indicator of positive development but also as a broad enabling factor that promotes and maintains optimal mental health” (p. 27).

Eudaimonic well-being is defined as an individual’s being fully functioning and self-realized (Ryan & Deci, 2001). The eudaimonic perspective assesses how well people live in relation to their true selves (Waterman, 1993) and involves a purpose in life and self-acceptance (Ryan & Deci, 2001; Ryff, 1989), quality of life (e.g., Keyes 2005; Vella-Brodrick, Park, & Peterson, 2009), motives and goals (Deci & Ryan, 2008; Peterson, Park, & Seligman, 2005; Ryff & Singer, 2008), and positive youth development (PYD) (Benson & Scales, 2009; Eccles & Gootman, 2002). The positive youth development (PYD) approach (Larson, 2000; Lerner & Benson 2004) is explicitly strengths-based, focusing on cultivating children’s assets, positive relationships, beliefs, morals, behaviors, and capacities with the aim of giving children the resources they need to grow successfully across the life course (Damon, 2004; Lippman, Moore, & McIntosh, 2011). Positive youth development framework has been conceptualized in a number of ways by several theoretical frameworks (for a review, see Lerner, Phelps, Forman, & Bowers, 2009). Indicators of thriving, positive development, or well-being are often treated as synonyms (Moore, Lippman, & Brown, 2004). Therefore, well-being understood from this perspective is often labelled as psychological well-being (PWB) (Extremera, Salguero, & Fernández-Berrocal, 2011).

Soutter, O’Steen, and Gilmore (2012) conceptualize well-being as a multi-dimensional, complex phenomenon, evidenced by the diversity of terms used to discuss and measure it. In addition, some scholars have pointed to the multidimensionality of well-being and believe that instruments should encompass both hedonic and eudaimonic well-being (Compton, Smith, Cornish, & Qualls, 1996; McGregor & Little, 1998; Ryan & Deci, 2001). However, there is no standard or widely accepted measure of either hedonic or eudaimonic well-being.

2. Present Study

2.1 Aims and objectives

As the construct of psychosocial well-being is multi-component, studies on the measurement of well-being can be arduous. The need for effective instruments for assessing child and adolescent well-being is constantly increasing (Ben-Arieh & Frønes, 2011), therefore, it is essential to systematically investigate the reliability and validity of assessment measures for psychosocial well-being. Similarly, Dodge, Daly, Hayton, and Sanders (2012) indicated that “as interest in the measurement of wellbeing grows, there is a greater necessity to be clear about what is being measured and how the resulting data should be interpreted, in order to undertake a fair and valid assessment” (Dodge et al 2012, p. 222).

The objective of this study was to systematically review the psychometric properties of the measures used in assessing the psychosocial well-being status of children and adolescents.

A systematic review of the literature on child well-being in English spanning from 1991 to 1999 (Pollard & Lee, 2003) assessed the domains, definitions, indicators and measurements of child well-being present in the literature. Our review updates and expands on this review to assess all available studies from 2000 to 2013 on the measurement properties of all available well-being assessment instruments that aim to measure the construct of well-being in childhood and adolescence. In this updated and expanded review, we focus on one of the key questions from the original study by Pollard and Lee (2003), but, in addition, we expand our
conception of well-being to include positive youth development. In the results section of this paper, we include only those studies that have been published after Pollard and Lee’s (2003) review; we did not systematically re-abstract studies from their review or reassess their quality.

Similarly to Pollard and Lee’s (2003) review, we used a three-phase methodology: a key term search (in the Abstract), a title screen review, and a content screen review. One significant deviation in the current review is the inclusion of a larger number of databases in order to conduct as comprehensive systematic analysis as possible and to include the term “positive youth development”.

3. Design and Methods

3.1 Search strategy

In our systematic search, we observed the guidelines and criteria for systematic reviews described by the Centre for Reviews and Dissemination (2008) and the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) Statement (Moher, Liberati, Tetzlaff, Altman, & Group, 2009).

The search was limited to references published from 2000 onwards, as this review updates and expands Pollard and Lee’s (2003) review of 1992-1999 in order to analyze the current state of child and adolescent well-being. The search carried out for the updated review covered nine online databases: PsychArticles, Scopus, Science Direct, Thomson Reuters, SocINDEX with Full Text, ERIC, MEDLINE, and Education Research Complete. The online search was completed on October 30, 2013.

The terms used in the literature search (with their synonyms and closely related words) were the following: “well-being” combined with “indicator” and “child” or “adolescent”. The online databases were searched for the selected key words using the algorithm presented in Figure 1. The search terms were applied to all databases (modified to meet the requirements of each database due to different field restrictions).

Table 1. Database Search Results

<table>
<thead>
<tr>
<th>Database</th>
<th>PsychArticles</th>
<th>Science Direct</th>
<th>Scope</th>
<th>Thompson Reuters</th>
<th>ERIC</th>
<th>MEDLINE</th>
<th>Education Research Complete</th>
<th>SocINDEX with Full Text</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key terms</td>
<td>Citations of key terms, per database</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well-being</td>
<td>42</td>
<td>238</td>
<td>300</td>
<td>913</td>
<td>66</td>
<td>221</td>
<td>271</td>
<td>274</td>
<td>2325</td>
</tr>
<tr>
<td>Quality of life</td>
<td>5</td>
<td>294</td>
<td>374</td>
<td>795</td>
<td>102</td>
<td>154</td>
<td>42</td>
<td>97</td>
<td>1863</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>11</td>
<td>68</td>
<td>277</td>
<td>360</td>
<td>82</td>
<td>77</td>
<td>104</td>
<td>91</td>
<td>1070</td>
</tr>
<tr>
<td>Happiness</td>
<td>2</td>
<td>28</td>
<td>97</td>
<td>162</td>
<td>39</td>
<td>77</td>
<td>46</td>
<td>24</td>
<td>475</td>
</tr>
<tr>
<td>Positive development</td>
<td>13</td>
<td>294</td>
<td>603</td>
<td>614</td>
<td>211</td>
<td>106</td>
<td>117</td>
<td>85</td>
<td>2043</td>
</tr>
<tr>
<td>Wellness</td>
<td>1</td>
<td>21</td>
<td>24</td>
<td>24</td>
<td>56</td>
<td>19</td>
<td>34</td>
<td>18</td>
<td>197</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>943</td>
<td>1675</td>
<td>2868</td>
<td>556</td>
<td>654</td>
<td>614</td>
<td>589</td>
<td>7973</td>
</tr>
</tbody>
</table>

Note. Duplicate articles arising from the same article appearing in multiple databases are included in the total number.

Besides the literature search, we developed a coding scheme to assess and evaluate the relevant information concerning the definitions, indicators and the quality of the instruments. The coding scheme included such subsections as general information (e.g., authors, type of publication, country), details of the study (e.g., method of data collection), the definition of well-being, well-being indicators, details of the instrument (e.g., name, language, information source, sample, etc.), and information about instrument reliability. The four raters involved were the
3.2 Study selection

First, the relevance of the studies was determined by screening the titles and abstracts. To ensure the inter-rater reliability, every rater evaluated the same selection of 1200 titles and the remaining abstracts (23% of all the titles). After training, the observed Kappa was 0.785 for the title screen review and 0.619 for the abstract screen review. As a rule of thumb, values of Kappa from 0.40 to 0.59 are considered moderate, 0.60 to 0.79 substantial, and 0.80 outstanding (Landis & Koch, 1977).

Five raters independently screened the 5195 (1039 each) citations obtained from the computerized database searches. The articles were sorted into relevant and non-relevant sets based on a title screen review. After screening the titles, the total number of relevant citations was 1215. The abstracts of these citations were further reviewed. As a result, 727 citations were excluded. The eligibility criteria for inclusion are presented in Table 2 and for exclusion in Table 3.

<table>
<thead>
<tr>
<th>Articles inclusion criteria in title screen stage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I unit</strong></td>
</tr>
<tr>
<td>Well-being</td>
</tr>
<tr>
<td>Wellness</td>
</tr>
<tr>
<td>Quality of life</td>
</tr>
<tr>
<td>Life satisfaction</td>
</tr>
<tr>
<td>Satisfaction with life</td>
</tr>
<tr>
<td>Self-esteem</td>
</tr>
<tr>
<td>Happiness</td>
</tr>
<tr>
<td>Positive development</td>
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<tr>
<td>Spirituality</td>
</tr>
<tr>
<td>Competencies</td>
</tr>
<tr>
<td>Assets</td>
</tr>
<tr>
<td>Strengths</td>
</tr>
</tbody>
</table>

Note. Duplicate articles arising from the same article appearing in multiple databases are included in the total number.

<table>
<thead>
<tr>
<th>Content Screen Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus is a clinical condition</td>
</tr>
<tr>
<td>The sample does not include a general or community population</td>
</tr>
<tr>
<td>Focus is well-being of parents</td>
</tr>
<tr>
<td>Sample has mean age of greater than 18 years; if the sample included children and adolescents, there is no specific analysis of them as a subgroup</td>
</tr>
<tr>
<td>Focus is fetal or neonatal well-being</td>
</tr>
<tr>
<td>Purpose is debate of ethical issue</td>
</tr>
<tr>
<td>Focus is mortality issue</td>
</tr>
<tr>
<td>No references are cited</td>
</tr>
<tr>
<td>Research is qualitative or experimental</td>
</tr>
<tr>
<td>No measurement are used</td>
</tr>
<tr>
<td>Purpose is systematic review or meta-analysis</td>
</tr>
<tr>
<td>Focus is intervention</td>
</tr>
<tr>
<td>Articles language is not English</td>
</tr>
</tbody>
</table>

3.3 Coding of publications and instruments

During the first rater training, three studies were randomly selected and rated by the four authors. This step revealed some weaknesses and misunderstandings of the coding scheme and the exclusion criteria, resulting in a first revision. The full list of the exclusion criteria for the content screen review is presented in Annex 1.

In the second step, 80 further studies of the 488 included were randomly selected and rated by all the authors to test the quality of the revised coding scheme. Inter-rater reliability was assessed by computing the agreement percentage for all variables; the values (in all cases?) fell between 86% and 100%. The remaining 408 publications were equally distributed among the four authors to be coded individually. After the article review and the coding procedure, 250 citations were excluded due to a number of reasons (see Figure 2). The total number of 238 publications was included in the final review.
4. Results

Overall, 186 measures of child and adolescent well-being were found. These measures vary in length and structure from one item scales to multidimensional questionnaires with more than 70 items. Most of the instruments included in this review do not use directly the concept of well-being. The concepts measured cover a variety of well-being indicators and synonyms broadly used in the well-being literature (Lippman, Moore, & McIntosh, 2011; Pollard & Lee, 2003). Most of the instruments (70%) measure positive indicators of well-being (e.g., life satisfaction, quality of life, self-esteem, etc.), others (20%) measure deficit indicators (e.g., anxiety, depression, stress, etc.), a few instruments (8%) measure both positive and deficit indicators, and there is a handful of instruments (2%) with undefined modality of well-being. Thus, the study reveals an ongoing theoretical shift from deficit well-being approach to strengths-based approach. However, the indicators measured range from narrow aspects of well-being to a single broad concept that defines the overall well-being. Many researchers still report that they measure well-being, in many cases succeeding to capture a single aspect of well-being, as observed in Pollard and Lee’s (2003) review.

Reliability information is reported for the majority of the instruments (78.6%). The reliability measure used for all these instruments is the Cronbach’s alpha internal consistency coefficient and for 6.3% of the instruments additionally test-retest reliability is reported. It is problematic that we were unable to find any reliability statistics reported for about one fifth of the instruments. Another issue is the reliability approach used in most of the studies. Although a more practical alternative for measuring reliability (such as an omega coefficient) was suggested decades ago (McDonnals, 1970) and the supremacy of this alternative for multidimensional instruments was widely acknowledged (Dunn, Baguley, Brunsden, 2013; Lucke, 2005), we did not find a single study that used any other statistics than a Cronbach’s alpha or a tests-retest rho coefficient.

We found reports of validity for 34.1% (N = 62) of the instruments. Out of those 62, the construct validity data was reported in 56.5% (N = 36) of the instruments, discriminant validity in 38.7% (N = 24), convergent and/or divergent validity in 33.9% (N = 21), concurrent validity in 17.7% (N = 11), content validity in 12.9% (N = 8), criterion and predictive validity in 9.7% (N = 6), face validity in 6.5% (N = 4), structure validity in 3.2% (N = 2), and incremental validity in 1.6% (N = 1) of the instruments. The validity information reported for 21% (N = 13) of these instruments did not include the type of validity. We found two or three types of validity in half of the instruments with the provided information on the validity criteria (in 23 out of 49); only one type in one third of the instruments (in 16 out of 49); four or five types of validity in one fifth of the instruments (in 9 out of 49). For one instrument as many as seven validity types were reported. Regrettably, for the majority of the instruments (65.9%) there was no validity statistics reported. Measurement validity is important in identifying...
quality research as it ensures that the same construct is measured across the studies. Therefore, future research on child and adolescent well-being should put emphasis on the choice of valid measures and the reports of validity statistics.

We found 173 instruments (out of 186) suitable for the measurement of well-being and its indicators in adolescence (11-18 years) and 78 instruments in the childhood (3-10 years). Notably, 36 of the instruments for measuring child and/or adolescent well-being reach the period of emerging adulthood (19-21 years) and 12 instruments are suitable for measuring well-being from birth. Thus, these results suggest that adolescent’s well-being studies are more popular than children’s well-being studies.

It is noteworthy that most of the studies were conducted in North America (45.9 %), 31 % in Europe, 11.9 % in Asia, 9.3 % in Australia, 1.4 % in Africa, and 0.5 % in South America. Only 4.3 % of the studies were cross-cultural. Although studies from North America (the USA and Canada) remain dominant, it is promising that more than half of the studies represent more diverse cultural backgrounds. However, cross-cultural studies should be encouraged more.

5. Strengths, Limitations, and Further Suggestions

Both strengths and shortcomings of this review should be considered. The main strength of this review is the extent of the conducted literature analysis that covers a substantial number of studies selected from a wide range of databases in the field of psychology.

The comparison of the well-being measurement instruments will allow finding more quality instruments easier for the researchers in the field. The choice of the instruments will be based not only on availability, but also on validity and reliability information and this will lead to more quality studies of children and adolescent’s well-being. In addition, smaller pool of quality instruments will lead to higher comparability of studies conducted and definitions used.

This review also offers full range of directly measured well-being indicators. This is a good way of bringing in front less popular but nevertheless important instruments, measuring wider range of well-being indicators. In addition, this allows covering broader range of different aspects of well-being in scientific studies.

The primary limitation concerns publication bias due to excluding gray literature, unpublished studies, and non-English publications.

An important course for future research leading to the deeper theoretical value and implications would be a further analysis of the domains and indicators of well-being, as the understanding of child and adolescent well-being remains equivocal.

6. Conclusion

We conducted a systematic review on instruments designed for measuring child and adolescent well-being. In all 238 relevant studies, limited to publications that were published from 2000 to October 30, 2013, were extracted. In total 182 measures of well-being (and its indicators) were found.

This review highlighted great interest in child and adolescent well-being and documented considerable progress in assessing this phenomenon from different perspectives. However, the variety of available instruments indicates not only the advancement in the field but also the lack of consensus regarding the indicators of well-being and its synonyms. However, that many researchers agree that a particular measure of well-being should be used is arguably less important than the need to critically examine the quality of the instruments used. Choosing the right research instrument requires taking into account the reliability and validity of measures to ensure research quality. We hope that this review will prove helpful in this process.

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Yonsei Nonchong, 11, 107-129.


Robson, K. (2009). Changes in family structure and the well-being of British children: evidence from a fifteen-year panel study. Child Indicator Research, 3(1) Published online at http://www.springerlink.com/content/3837303h43mq7n


Tiggesmann, M., Winefield, A. H. (1984). The effects of...


### Annex 1

**Well-being Instruments, Indicators of Well-being, age of studies participants, validity and reliability criteria, and Country of Origin, Reference & Sample Information**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Indicators of Well-being</th>
<th>Age</th>
<th>Validity</th>
<th>Reliability</th>
<th>Country/Reference (N(%)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Well-Being Scale (PWBS; Ryff, 1989; Ryff &amp; Keyes 1995)</td>
<td>Self-acceptance, Positive relations with others, Autonomy, Environmental mastery, Purpose in life, Personal growth</td>
<td>12-19</td>
<td>CV DC CS</td>
<td>α = .76-.95</td>
<td>USA / Seaton, Neblett, Upton, Hammond, &amp; Sellers, 2011 (572 (65)); Vrangalova &amp; Savin-Williams, 2011 (484 (48)); Bundick, 2011 (201 (49)); Italy, Belarus / Sirigatti, 2013 (1114 (81)); Korea / Jin &amp; Moon, 2006 (299 (28)); New Zeland / Jose, Ryan &amp; Pryor, 2012 (2174 (52));</td>
<td></td>
</tr>
<tr>
<td>The questions on future orientation, adapted from the Ryff Well-being Scale (Ryff &amp; Keyes, 1995; Jose, Ryan &amp; Pryor, 2012) Youth well-being index (Erbstein et al., 2013)</td>
<td>Future orientation</td>
<td>10-15</td>
<td></td>
<td>α = .78</td>
<td>USA / Erbstein, Hartzog, &amp; Geraghty, 2013 (N/A (N/A));</td>
<td></td>
</tr>
<tr>
<td>P.G.I. General Well-Being Scale (Verma et al., 1983)</td>
<td>Health, Education, Social relationships, Community context</td>
<td>12-17</td>
<td></td>
<td>α = .85-.97</td>
<td>USA / Erbstein, Hartzog, &amp; Geraghty, 2013 (N/A (N/A));</td>
<td></td>
</tr>
<tr>
<td>The school-age version of the Personal Well-Being Index (PWI; Cummins, 1998, 2003)</td>
<td>Subjective / Personal well-being: happiness in / satisfaction with: standard of living, Health, Achieving in life, Relationships, Safety, Community connection, Future security, Spirituality or Religion</td>
<td>7-18</td>
<td>CV CS</td>
<td>α = .70-.84</td>
<td>Australia / Tomyn, Fuller, Tyszkiewicz, &amp; Norrish, 2013 (8762 (57.5)); Toner, Haslam, Robinson, &amp; Williams, 2012 (501 (45.7)); Spain / Vaqué, González, &amp; Casas, 2012 (371 (46.4)); Casas, Figue, Gonzalez, &amp; Malo, 2007 (1618 (53)); Casas, Bello, Gonzalez, &amp; Aligue, 2013 (5934 (N/A)); Romania, Spain / Casas, Baltatescu, Bertran, Gonzalez, &amp; Hatos, 2013 (3532 (51)); UK / Axford &amp; Hobbs, 2011 (5000 (N/A)); New Zeland / Aminzadeh et al., 2013 (5508 (47.3)); UK / Clarke et al., 2011 (1650 (50.1));</td>
<td></td>
</tr>
<tr>
<td>The World Health Organization WHO-5 (WHO-5; World Health Organization; Bech, Gudex, &amp; Johansen, 1996; Bech, Olsen, Kjoller, &amp; Rasmussen, 2003)</td>
<td>Psychological well-being; Perception of positive affect; Perception of quality of functioning</td>
<td>13-17</td>
<td>CS</td>
<td>α = .89 rho = .57</td>
<td>New Zeland / Aminzadeh et al., 2013 (5508 (47.3)); UK / Clarke et al., 2011 (1650 (50.1));</td>
<td></td>
</tr>
</tbody>
</table>
**Students' Life Satisfaction Scale (SLSS; Huebner, 1991)**

| Life satisfaction | 8-19 | CC | α = .80-.89 | USA / Suldo & Huebner, 2004 (1045 (64)); Suldo & Huebner, 2006 (698 (64)); Seligson, Huebner, & Valois, 2003 (221 (42)); Seligson, Huebner, & Valois, 2005 (518 (52.8)); Shaffer-Hudkins, Suldo, Loker, & March, 2010 (401 (60)); Suldo, Shannon, & Huebner, 2004 (1188 (64)); Suldo, Shannon, & Huebner, 2006 (698 (64)); Suldo, Shaffer, & Riley, 2008 (321 (68)); Gillham et al., 2011 (149 (51.6)); Chappel, Suldo, & Ogg, 2012 (183 (64)); McCullough, Huebner, & Laughlin, 2000 (92 (51)); Bluth & Blanton, 2013 (67 (58.2)); Norway / Iversen & Holsen, 2008 (1153 (N/A)); Portugal / Marques, Pais-Ribeiro, & Lopez, 2007 (367 (53.1)); Marques et al., 2011 (367 (53.1)); Spain / Casas, Bello, et al., 2013 (5934 (N/A)); UK / Proctor et al., 2011 (319 (52.9)); Canada / Gadermann et al., 2010 (1266 (48)); Taiwan / Lee et al., 2013 (488 (47)); Kosovo, Albania, Italy, Bosnia, Croatia, Austria / Sujoldžić & De Lucia, 2007 (1934 (57.3)); Germany / Marsh, Trautwein, Ludke, Koller, & Baumert, 2006 (4475 (55)); Hirschi, 2009 (330 (50)); Israel / Weber, Ruch, Littman-Ovadia, Lavy, & Gai, 2013 (396 (49.7)); New Zealand / Jose et al., 2012 (2174 (52)); Italy / Alessandri, Caprara, & Tsak, 2012 (298 (55)); Canada / Morton et al., 2011 (852 (50)); Guhn et al., 2012 (3026 (48)); Oberle, Schonert-Reichl, & Zumbo, 2011 (1402 (47)); |
| | | CS | ρho = .53-.76 | |
| | | CT | .76 | |
| | | CN | | |
| | | PD | | |
| | | CV | | |
| | | DV | | |
| | | DC | | |

**Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985; Pavot & Diener, 1993)**

| Satisfaction with Life Scale | 9-20 | CV | α = .67-.93 | China / Wang et al., 2009 (509 (39)); Leung & Zhang, 2000 (1099 (39.6)); Norway / Moksnes et al., 2013 (1289 (51.2)); USA / Vera et al., 2008 (151 (55)); Vrangalova & Savin-Williams, 2011 (484 (48)); Froh et al., 2010 (2198 (N/A)); Bundick, 2011 (201 (49)); Cohen, Greene, Toyinbo, & Siskowski, 2012 (1281 (44.7)); Dockendorff et al., 2012 (2174 (52)); Canada / Gadermann et al., 2010 (1266 (48)); Taiwan / Lee et al., 2013 (488 (47)); Kosovo, Albania, Italy, Bosnia, Croatia, Austria / Sujoldžić & De Lucia, 2007 (1934 (57.3)); Germany / Marsh, Trautwein, Ludke, Koller, & Baumert, 2006 (4475 (55)); Hirschi, 2009 (330 (50)); Israel / Weber, Ruch, Littman-Ovadia, Lavy, & Gai, 2013 (396 (49.7)); New Zealand / Jose et al., 2012 (2174 (52)); Italy / Alessandri, Caprara, & Tsak, 2012 (298 (55)); Canada / Morton et al., 2011 (852 (50)); Guhn et al., 2012 (3026 (48)); Oberle, Schonert-Reichl, & Zumbo, 2011 (1402 (47)); |
| | | DC | | |
| | | CS | | |

**Satisfaction with life scale adapted for children (SWLS-C; Gadermann et al., 2010) (based on SWLS; Diener et al., 1985)**

| Satisfaction with life scale adapted for children | 9-16 | V | α = .83-.93 | |
Single-item scale that assessed life-satisfaction globally (Andrews & Withey, 1976) 
Cantril Ladder (Cantril, 1965)

Index of Well-Being / Single-Item Scale on Overall Life Satisfaction (OLS; Campbell et al., 1976)

An abbreviated version of Life satisfaction scale (Warr et al. 1979)

Multidimensional Students’ Life Satisfaction Scale (MSLSS; Huebner, 1991; 1994; 2001; Pavot et al., 1991)

The Brief Multidimensional Students’ Life Satisfaction Scale (BMSLSS; Seligson et al., 2003; Huebner et al., 2004)

Abbreviated six-item Multidimensional Students’ Life Satisfaction Scale (AMSLSS; Seligson et al., 2003)

Items on satisfaction with different aspects of life (Drukker et al., 2003)

Friends, Neighborhood, School, Teacher, Home, Leisure activities and Relationship with parents
<table>
<thead>
<tr>
<th>Scale/Questionnaire</th>
<th>Domain</th>
<th>Range</th>
<th>α</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Ego Resiliency Scale (ER89; Block &amp; Kremen, 1996)</td>
<td>Psychological resilience</td>
<td>16-20</td>
<td>.73-.74</td>
<td>Italy / Alessandri et al., 2012 (298 (55)); USA / Bartko &amp; Eccles, 2003 (1004 (50));</td>
</tr>
<tr>
<td>Psychological resiliency 4 item scale (Bartko &amp; Eccles, 2003)</td>
<td>Psychological resilience</td>
<td>16-17</td>
<td>.73</td>
<td>Canada / Gadermann et al., 2010 (1266 (48)); Guhn et al., 2012 (3026 (48));</td>
</tr>
<tr>
<td>Resiliency Inventory Subscale (Noam &amp; Goldstein 1998; Oberle et al. 2010; Song 2003)</td>
<td>Optimism, Self-efficacy</td>
<td>9-14</td>
<td>.65-.79</td>
<td>Italy / Alessandri et al., 2012 (298 (55)); Serbia / Jovanovic &amp; Zuljevic, 2013 (408 (61.2));</td>
</tr>
<tr>
<td>The Life Orientation Test (Scheier et al., 1994)</td>
<td>Optimism, Self-efficacy</td>
<td>15-20</td>
<td>.73-.83</td>
<td>Canada / Gadermann et al., 2010 (1266 (48)); Guhn et al., 2012 (3026 (48));</td>
</tr>
<tr>
<td>The Self-Description Questionnaire for preadolescents (SDQ I; Marsh, 1988)</td>
<td>Self-concept, Depression</td>
<td>9-14</td>
<td>.70-.87</td>
<td>Canada / Gadermann et al., 2010 (1266 (48)); Guhn et al., 2012 (3026 (48));</td>
</tr>
<tr>
<td>Interpersonal Reactivity Index (IRI; Davis, 1980)</td>
<td>Emphatic concern, Perspective taking</td>
<td>9-14</td>
<td>.85-.79</td>
<td>Canada / Gadermann et al., 2010 (1266 (48)); Hong Kong / Siu &amp; Shek, 2005 (1462 (59.1));</td>
</tr>
<tr>
<td>The Chinese Interpersonal Reactivity Index (C-IRI; Siu, 2003) (Based on Davis, 1996)</td>
<td>Empathy, Fantasy and Personal Distress</td>
<td>11-17</td>
<td>.70-.75</td>
<td>Norway / Moksnes et al., 2013 (1289 (51.2)); Korea / Jin, &amp; Moon, 2006 (299 (28));</td>
</tr>
<tr>
<td>Orientation to Life Questionnaire (Antonovsky, 1987)</td>
<td>Sense of Coherence</td>
<td>13-16</td>
<td>.84</td>
<td>Italy / Soresi et al., 2012 (762 (52.5)); Nota et al., 2011 (1422 (70));</td>
</tr>
<tr>
<td>The Satisfaction With School Life questionnaire (Jin &amp; Moon, 2006)</td>
<td>Satisfaction with school life</td>
<td>16-18</td>
<td>.90</td>
<td>China / Kong, 2008 (19477 (50.1));</td>
</tr>
<tr>
<td>My Life as a Student (Soresi &amp; Nota, 2003)</td>
<td>Quality of school life</td>
<td>10-13</td>
<td>.69-.83</td>
<td>Turkey / Sari, 2012 (578 (NA));</td>
</tr>
<tr>
<td>Quality of School Life Scale (Sari, 2007)</td>
<td>Quality of school life</td>
<td>8-11</td>
<td>.71-.87</td>
<td>Australia / Jimmieson et al., 2010 (3057 (52.7));</td>
</tr>
<tr>
<td>The Quality of School Life Questionnaire (QSL; Ainley &amp; Bourke, 1992)</td>
<td>Quality of school life</td>
<td>10-16</td>
<td>.80-.91</td>
<td>China / Kong, 2008 (19477 (50.1));</td>
</tr>
<tr>
<td>Chinese version of the original Australian Quality of school life questionnaire (validated by Pang, 1999)</td>
<td>Quality of school life</td>
<td>7-15</td>
<td>.62-.91</td>
<td>Scotland, UK / Karatzias et al., 2001 (425 (55.8)); USA / Casanueva, Dolan, Smith, Ringiesen, &amp; Dowd, 2012 (5873 (49.2)); UK / Miller, Connolly, &amp; Maguire, 2013 (1081 (47.2));</td>
</tr>
<tr>
<td>The Quality of School Life scale (Karatzias et al., 2001)</td>
<td>Academic achievement</td>
<td>0-17</td>
<td>.62-.91</td>
<td>Scotland, UK / Karatzias et al., 2001 (425 (55.8)); USA / Casanueva, Dolan, Smith, Ringiesen, &amp; Dowd, 2012 (5873 (49.2)); UK / Miller, Connolly, &amp; Maguire, 2013 (1081 (47.2));</td>
</tr>
<tr>
<td>The Woodcock-Johnson III Tests of Cognitive Abilities (Woodcock et al. 2001)</td>
<td>Enjoyment of education</td>
<td>11-17</td>
<td>.78</td>
<td>Scotland, UK / Karatzias et al., 2001 (425 (55.8)); USA / Casanueva, Dolan, Smith, Ringiesen, &amp; Dowd, 2012 (5873 (49.2)); UK / Miller, Connolly, &amp; Maguire, 2013 (1081 (47.2));</td>
</tr>
<tr>
<td>Enjoyment of education attitudinal scale (Pell &amp; Jarvis, 2001)</td>
<td>Enjoyment of education</td>
<td>11-17</td>
<td>.78</td>
<td>Scotland, UK / Karatzias et al., 2001 (425 (55.8)); USA / Casanueva, Dolan, Smith, Ringiesen, &amp; Dowd, 2012 (5873 (49.2)); UK / Miller, Connolly, &amp; Maguire, 2013 (1081 (47.2));</td>
</tr>
<tr>
<td>Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997, 2001)</td>
<td>Emotional symptoms, Conduct problems, Hyperactivity, Peer problems, Prosocial behavior</td>
<td>0-20</td>
<td>.56-.81</td>
<td>Australia / Mathers et al., 2009 (1662 (48.9)); Nicholson, Lucas, Berthelsen, &amp; Wake, 2012 (5000 (48.8)); Scotland ,UK / Lauder et al., 2010 (1787 (52.7)); UK / Ussher, Owen, Cook, &amp; Whincup, 2007 (2623 (47.2)); Maynard &amp; Harding, 2010a (4349 (N/A)); Maynard &amp; Harding, 2010b (4349 (N/A)); Maynard, Harding, &amp; Minnis, 2007 (6632 (N/A)); Astell-Burt, Maynard, Lenguerrand, &amp; Harding, 2012 (4782 (32.7)); Deighton et al., 2013 (9881 (50.2)); Griggs, Tan, Buchanan, Attar-Schwartz, &amp; Flouri, 2010 (1569 (N/A));</td>
</tr>
</tbody>
</table>
Ireland / McAuley & Layte, 2012 (8568 (N/A)); Belgium / Ghysels & Van Vlaesselaer, 2008 (3254 (N/A));

Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977).

<table>
<thead>
<tr>
<th>Scale/Inventory</th>
<th>Domain</th>
<th>Lower</th>
<th>Upper</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beck Youth Depression Inventory (Beck, Beck, &amp; Jolly, 2001)</td>
<td>Depression</td>
<td>11-18</td>
<td>18</td>
<td>.90</td>
</tr>
<tr>
<td>Korean beck depression inventory (KBDI; Lee &amp; Song 1991)</td>
<td>Depression</td>
<td>15-19</td>
<td>18</td>
<td>.91</td>
</tr>
<tr>
<td>Self-Rating Scale of Depression (Birleson, 1981)</td>
<td>Depression</td>
<td>12-16</td>
<td>18</td>
<td>.72</td>
</tr>
<tr>
<td>Children’s depression inventory (CDI; Kovacs, 1992)</td>
<td>Depression</td>
<td>0-18</td>
<td>18</td>
<td>.86-.92</td>
</tr>
<tr>
<td>Depressive Mood Scale (Kandel, &amp; Davies, 1982)</td>
<td>Depressive mood</td>
<td>12-20</td>
<td>18</td>
<td>.81-.82</td>
</tr>
<tr>
<td>Korean test anxiety inventory (KTAI; Hwang 1997)</td>
<td>Anxiety</td>
<td>15-19</td>
<td>18</td>
<td>.92</td>
</tr>
<tr>
<td>Revised Child Manifest Anxiety Scale (RCMAS; Reynolds &amp; Richmond, 1978)</td>
<td>Anxiety</td>
<td>10-13</td>
<td>18</td>
<td>.86</td>
</tr>
<tr>
<td>Social Anxiety Scale for Adolescents (SAS–A; La Greca &amp; Lopez, 1998)</td>
<td>Social anxiety</td>
<td>13-18</td>
<td>18</td>
<td>.93-.94</td>
</tr>
<tr>
<td>The Mental Health Continuum-Short Form (MHC-SF, Keyes, 2006; Keyes et al., 2008)</td>
<td>Mental health</td>
<td>13-16</td>
<td>CS</td>
<td>.88</td>
</tr>
</tbody>
</table>

USA / Gestsdottir, Bowers, Eye, Napolitano, Lerner, 2010 (2357 (63)); Russell, Crockett, Shen, & Lee, 2008 (1170 (51.7)); Lerner et al., 2005 (1117 (52.8)); Seaton et al., 2010 (2198 (N/A)); Froh et al., 2010 (1512 (55)); Musick & Meier, 2012 (17977 (N/A)); Canada / Rose-Krasnor et al., 2006 (7430 (50)); Good & Willoughby, 2010 (6578 (51)); Germany / Walper, 2009 (358 (54.5)); Sweden / Ojala, 2012 (293 (48));

Canada / McLean, Breen, & Fournier, 2010 (146 (0)); Korea / Kim, Choi, Kim, & Park, 2009 (374 (0));

USA / Cooper & McLoyd, 2011 (190 (45));

Canada / Gillham et al., 2011 (149 (51.6));

USA / Patrick et al., 2002 (116 (N/A)); Rudolph, Caldwell, & Conley, 2005 (153 (54.9)); Wigderson & Lynch, 2013 (388 (47.9)); Casanueva et al., 2012 (5873 (49.2)); Bartko & Eccles, 2003 (1004 (50));

Canada / Lagacé-Séguin & D’Entremont, 2010 (98 (66));

USA / Loth, Mond, Wall, & Neumark-Sztainer, 2011 (2516 (55));

Korea / Kim et al., 2009 (374 (0));

USA / Rudolph et al., 2005 (153 (54.9));

Canada / Rose-Krasnor et al., 2006 (7430 (50)); Willoughby et al., 2007 (7430 (50)); Good & Willoughby, 2010 (6578 (51)); USA / Wigderson & Lynch, 2013 (388 (47.9));

UK / Clarke et al., 2011 (1650 (50.1));
<table>
<thead>
<tr>
<th>Measure</th>
<th>Domain/Scales Descriptions</th>
<th>Validated in (Year, Methodology)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior Problems Index (BPI; Peterson &amp; Zill, 1986)</td>
<td>Mental health: Depression / Hyperactivity, Anxiety / Depression Psychological distress (anxiety/depression),</td>
<td>South Africa / Guse &amp; Vermaak, 2011 (1169 (50.9)); USA / McLeod &amp; Owens, 2004 (547 (N/A); Cohen et al., 2012 (1281 (44.8)); Australia / Mathers et al., 2009 (1662 (48.9));</td>
</tr>
<tr>
<td>Perceived Stress scale (PSS; Cohen et al. 1983).</td>
<td>Coping (voluntary engaged and voluntary disengaged)</td>
<td>USA / Cohen et al., 2012 (1281 (44.8));</td>
</tr>
<tr>
<td>Six items from the Social Stress Version of the Response to Stress Questionnaire (RSQ; Connor-Smith et al., 2000)</td>
<td>Depressive symptoms (sadness)</td>
<td>Canada / Guhn et al., 2012 (3026 (48));</td>
</tr>
<tr>
<td>The Seattle Personality Questionnaire (Kusche et al. 1988; Rains 2003).</td>
<td>Negative affective states (depression, anxiety, stress)</td>
<td>Serbia / Jovanovic &amp; Brdaric, 2012 (408 (61.2)); Jovanovic &amp; Zuljevic, 2013 (408 (61.2)); USA / Burrow, O’ Dell, &amp; Hill, 2010 (318 (N/A); McCullough et al., 2000 (92 (51)); Bluth &amp; Blanton, 2013 (67 (58.2)); Burrow &amp; Hill, 2011 (107 (51)); Germany / Marsh et al., 2006 (4475 (55)); UK / Proctor et al., 2011 (319 (52.9)); Italy / Alessandri et al., 2012 (298 (55)); USA / Seligson et al., 2005 (518 (52.8)); Seligson et al., 2003 (221 (42)); Shaffer-Hudkins et al., 2010 (401 (60)); Vera et al., 2008 (151 (55)); Flook et al., 2010 (2198 (N/A))</td>
</tr>
<tr>
<td>The Serbian Inventory of Affect based on the Positive and Negative Affect Schedule-X (SIAB-PANAS; Novovic &amp; Mihic, 2008)</td>
<td>Positive affect, Negative affect</td>
<td>Serbia / Jovanovic &amp; Brdaric, 2012 (408 (61.2); Jovanovic &amp; Zuljevic, 2013 (408 (61.2)); USA / Flook, 2011 (783 (52)) ; USA / Seligson et al., 2005 (518 (52.8)); Seligson et al., 2003 (221 (42)); Shaffer-Hudkins et al., 2010 (401 (60)); Vera et al., 2008 (151 (55)); Flook et al., 2010 (2198 (N/A))</td>
</tr>
<tr>
<td>The Affect Balance Scale (ABS; Bradburn, 1969)</td>
<td>22 affect adjectives (Froh, Yurkewicz, &amp; Kashdan, 2009)</td>
<td>USA / Weber et al., 2013 (396 (49.7)); USA / Froh et al., 2009 (145 (44));</td>
</tr>
<tr>
<td>The 7-item negative mood scale (Tiggemann &amp; Winefield; 1984)</td>
<td>Positive mood</td>
<td>USA / Flook, 2011 (783 (52)) ;</td>
</tr>
<tr>
<td>Time Use and Planning Scale (Lin et al., 2007)</td>
<td>Positive affect</td>
<td>USA / Flook, 2011 (783 (52)) ;</td>
</tr>
<tr>
<td>The self-control scale (Gottfredson &amp; Hirschi, 1990)</td>
<td>Negative mood</td>
<td>Australia / Delfabbro et al., 2013 (2552 (58.2)); Taiwan / Lee et al., 2013 (488 (47)); Taiwan / Lee et al., 2013 (488 (47));</td>
</tr>
</tbody>
</table>
### The Chinese Social Problem - Solving Inventory Revised Short Form (C-SPSI-R; D’Zurilla et al., 1996)
- **Social problem-solving**
  - 11-17
  - DC
  - CS
  - $\alpha = .80$
  - Hong Kong/ Siu & Shék, 2005 (1462 (59.1));

### The Piers-Harris 2 (PH2; Holder & Coleman 2008)
- **Happiness and satisfaction, physical appearance and attributes, popularity, freedom from anxiety**
  - 9-12
  - $\alpha = .72-.91$
  - Australia / O'Rourke & Cooper, 2010 (312 (56.4));

### The Subjective Happiness Scale (SHS; Lyubomirsky & Lepper, 1999)
- **Happiness**
  - 9-19
  - CS
  - CV
  - DC
  - $\alpha = .67-.83$
  - Nethererlands / De Bruin, Zijlstra, Van de Weijer-Bergsma, & Bögels, 2011 (717 (48.7)); China / Kashdan & Yuen, 2007 (484 (56.6)); Canada / Holder & Klassen, 2010 (320 (51)); Australia / O'Rourke & Cooper, 2010 (312 (56.4)); USA / Froh et al., 2010 (2198 (N/A)); Burrow & Hill, 2011 (107 (51)); USA / Gillham et al., 2011 (149 (51.6));

### Fordyce Emotions Questionnaire (FEQ; Fordyce, 1988)
- **13-15
  - $\alpha = .60$
  - USA / Gillham et al., 2011 (149 (51.6));

### Faces Scale (Abdel-Khalek 2006; Harry 1976; Stull 1988).
- **9-12
  - V
  - Canada / Holder & Klassen, 2010 (320 (51)); Australia / O'Rourke & Cooper, 2010 (312 (56.4));

### Oxford Happiness Questionnaire, Short Form (Hills & Argyle, 2002)
- **Happiness (satisfaction with life scale, mastery and self-fulfillment, social cheerfulness, vigor, social interest)**
  - 14-19
  - CS
  - $\alpha = .65-.90$
  - Italy / Meleddu, Guacciardi, Scalas, & Fadda, 2012 (782 (56));

### Happiness Scale (Robson, 2009)
- **Happiness with school work, appearance, family, friends, and life as a whole**
  - 11-16
  - $\alpha = .71$
  - Canada / Robson, 2009 (15585 (N/A));

### Authentic Happiness Inventory (AHI, Peterson, 2005)
- **Happiness: (pleasure (positive emotion), engagement, meaning)**
  - 15-18
  - $\alpha = .93$
  - Australia / Toner et al., 2012 (501 (45.7));

### Piers-Harris Children’s Self-Concept Scale 2 ed. (Piers & Hertzberg, 2002)
- **Self-concept**
  - 9-11
  - $\alpha = .72-.88$
  - Australia / O'Rourke & Cooper, 2010 (312 (56.4)); Ireland / McAuley & Layte, 2012 (8568 (N/A));

### Friendship Scale (Lin et al., 2007)
- **Friendship**
  - 13-14
  - Taiwan / Lee et al., 2013 (488 (47));

### Peer Support Scale (Armsden & Greenberger, 1987)
- **Peer support**
  - 14-17
  - $\alpha = .97$
  - USA / Gestsdottir et al., 2010 (2357 (63));

### The family and friends sub-scales of Social Support Appraisals scale (SSA; Vaux et al. 1986)
- **Social support**
  - 13-15
  - Spain / Casas, Figuer, Gonzalez, Malo, Alsinet, et al., 2007 (3252 (52.3));

### Nine items drawn from the Quality of Friendships Questionnaire (QDA; Capaldi & Patterson, 1989)
- **Perceived quality of interpersonal relationships**
  - 16-20
  - $\alpha = .73-.81$
  - Italy / Alessandri et al., 2012 (298 (55));

### Rosenberg Self-Esteem Scale, (Rosenberg, 1965)
- **Self-esteem**
  - 8-20
  - CC
  - DC
  - PD
  - CS
  - $\alpha = .68-.91$
  - China / Kashdan & Yuen, 2007 (484 (56.6)); USA / Van den Berg et al., 2010 (4746 (49.7)); Seaton et al., 2010 (1170 (51.7)); Wigderson & Lynch, 2013 (388 (47.9)); Froh et al., 2010 (2198 (N/A)); Loth et al., 2011 (2516 (55)); Seaton et al., 2010 (1170 (51.7)); Adler-Baeder et al., 2010 (1512 (60.3)); Cooper & Mcloyd, 2011 (190 (45));
<table>
<thead>
<tr>
<th>Measurement</th>
<th>Scale</th>
<th>Country/Region</th>
</tr>
</thead>
</table>
| Korean self-esteem inventory                                              | (Jeon, 1974) (Based on Rosenburg Self-Esteem Scale; Rosenberg, 1965) | 15-19 α = .78 (Korea / Kim et al., 2009 (374 (0));
|                                                                           |                                |                                |
| Texas Social Behaviour Inventory                                          | (TSBI-Form A; Helnreich & Stapp, 1974) | 15-21 α = .85 (Australia / Donchi & Moore, 2004 (336 (66));
|                                                                           |                                |                                |
| Hare Self-esteem Scale (HSES; Hare, 1985)                                 |                                |                                |
|                                                                           | Self-esteem (general and area-specific: school, peer and home) | 12-15 α = .75 (Scotland, UK / Karatzias et al., 2001 (425 (55.8));
|                                                                           |                                | Karatzias, et al., 2006 (425 (54.8));
|                                                                           |                                |                                |
|                                                                           | Self-esteem (satisfaction with body/looks, Subjective evaluation of performance at school and of potential teachers evaluation of the school work) | 12-16 α = .79-.84 (Sweden / Källestål, Dahlgren, & Stenlund, 2006 (3370 (N/A));
|                                                                           |                                |                                |
|                                                                           | Body satisfaction              | 12-20 α = .92-.93 (USA / Loth et al., 2011 (2516 (55));
|                                                                           |                                |                                |
|                                                                           | Self-worth, Social competency  | 11-13 α = .79-.84 (USA / Yan, Howard, Beck, Shattuck, & Hallmark-Kerr, 2010 (325 (51.8));
|                                                                           |                                |                                |
|                                                                           | Academic competence, Social competence, Physical competence, Physical appearance, Conduct or behavior adequacy, Self-worth. | 10-17 α = .63-.81 (USA / McLeod & Owens, 2004 (547 (N/A)); Kipp & Weiss, 2013 (303 (100)); Gestsdottir et al., 2010 (2357 (63)); Lerner et al., 2005 (1117 (52.8)); Li et al., 2010 (1710 (51.9));
|                                                                           |                                | UK / Miller et al., 2013 (1081 (47.2));
|                                                                           |                                | Portugal / Marques et al., 2011 (367 (53.1));
|                                                                           |                                | USA / Fletcher, Hunter, & Eanes, 2006 (404 (51));
|                                                                           |                                |                                |
|                                                                           | Self-efficacy                  | 9-10 α = .79-.84 (Spain / Casas, Figuer, Gonzalez, Malo, Alsinet, et al., 2007 (3252 (52.3));
|                                                                           |                                | Germany / Hirschi, 2009 (330 (50));
|                                                                           |                                |                                |
|                                                                           | Personal mastery               | 12-16 α = .79-.84 (USA / Diehl, Howse, & Trivette, 2011 (54 (53.7));
|                                                                           |                                |                                |
|                                                                           | Sense of power (control over "Things that happen to me") | 12-16 α = .79-.84 (Germany / Hirschi, 2009 (330 (50));
|                                                                           |                                |                                |
|                                                                           | Perceptions of control         | 10-17 α = .79-.84 (USA / Fletcher, Hunter, & Eanes, 2006 (404 (51));
<p>| | | |
|                                                                           |                                |                                |</p>
<table>
<thead>
<tr>
<th>Scale/Inventory</th>
<th>Measurement</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Sample/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief Infant-Toddler Social and Emotional Assessment Scale (BITSEA)</td>
<td>Socio-emotional competence</td>
<td>0-7</td>
<td>α = .64</td>
<td>Australia / Nicholson et al., 2012 (5000 (48.8));</td>
</tr>
<tr>
<td>Teacher Assessment of Social Behavior (TASB; Cassidy &amp; Asher, 1992)</td>
<td>Social competence</td>
<td>9-13</td>
<td>α = .72-.77</td>
<td>USA / Rudolph et al., 2005 (153 (54.9));</td>
</tr>
<tr>
<td>Six characteristics of the child positive social experiences of other people (Lahikainen et al., 2008)</td>
<td>Social network characteristics</td>
<td>11-12</td>
<td></td>
<td>Estonia / Lahikainen, Tolonen, &amp; Kraav, 2008 (392 (N/A));</td>
</tr>
<tr>
<td>Psychosocial Inventory of Ego Strength (PIES; Markstrom, Sabino, Turner, &amp; Berman, 1997)</td>
<td>Erikson’s eight ego strengths</td>
<td>15-17</td>
<td>α = .60-.94</td>
<td>USA / Markstrom &amp; Marshall, 2007 (502 (60)); Markstrom, Li, Blackshire, &amp; Wilfong, 2005 (517 (60.3));</td>
</tr>
<tr>
<td>Communication and Symbolic Behaviour Scale (CSBS(P); Briggs-Gowan, et al., 2004)</td>
<td>Communication, vocabulary, Emergent literacy skills</td>
<td>0-7</td>
<td>α = .89</td>
<td>Australia / Nicholsonet al., 2012 (5000 (48.8));</td>
</tr>
<tr>
<td>The Preschool Language Scale-3 (PLS-3; Zimmerman et al. 1992)</td>
<td>Language development</td>
<td>0-17</td>
<td></td>
<td>USA / Casanueva et al., 2012 (5873 (49.2));</td>
</tr>
<tr>
<td>Korean Juvenile Delinquency Trait Scale (Kim 1994)</td>
<td>Delinquency</td>
<td>15-19</td>
<td>α = .65</td>
<td>Korea / Kim et al., 2009 (374 (0));</td>
</tr>
<tr>
<td>Delinquent activities in the past 12 months (following Pearce &amp; Haynie, 2004)</td>
<td></td>
<td>13-18</td>
<td>α = .72-.80</td>
<td>USA / Musick &amp; Meier, 2012 (17977 (N/A));</td>
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<tr>
<td>Delinquent Attitude Scale (DAS; Widmer and Weiss 2000)</td>
<td>Delinquent attitude</td>
<td>12-16</td>
<td>α = .84</td>
<td>USA / Phillips, 2012 (278 (52));</td>
</tr>
<tr>
<td>Deviant Behavior Scale-Taiwanese Adolescent Version (Hsu, 1996)</td>
<td>Deviant behavior</td>
<td>13-14</td>
<td></td>
<td>Taiwan / Lee et al., 2013 (488 (47));</td>
</tr>
<tr>
<td>Middle Years Development Instrument (MDI; Schonert-Reichl et al., 2013)</td>
<td>Social and emotional development, Physical health and well-being, Connectedness, School experiences, After-school time Strengths</td>
<td>9-11 CV</td>
<td>α = .65-.87</td>
<td>Canada / Schonert-Reichl et al., 2013 (2000 (49));</td>
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<tr>
<td>The Strengths Assessment Inventory: SAI-Y (Rawana &amp; Brownlee 2010).</td>
<td></td>
<td>9-19 V</td>
<td>α = .60-.95</td>
<td>Canada / Brazeau, Teatero, Rawana, Brownlee, &amp; Blanchette, 2012 (572 (52.3));</td>
</tr>
<tr>
<td>The Parenting Style Inventory (PSI-II; Darling &amp; Toyokawa 1997)</td>
<td>Demandingness, Responsiveness, Autonomy-granting</td>
<td>7-18</td>
<td></td>
<td>UK / Axford &amp; Hobbs, 2011 (5000 (N/A));</td>
</tr>
<tr>
<td>Child’s Report of Parenting Behaviors Inventory (CRPBI; Schludermann &amp; Schludermann, 1970)</td>
<td>Ecological assets (parental warmth: acceptance, nurturance, support, and a feeling of being loved and wanted by the parent)</td>
<td>10-12</td>
<td>α = .94-.96</td>
<td>USA / Lerner et al., 2005 (1117 (52.8));</td>
</tr>
<tr>
<td>Parental Monitoring Scale (PMS; Small &amp; Kerns, 1993)</td>
<td>Ecological asset: Parental monitoring</td>
<td>10-12</td>
<td>α = .89</td>
<td>USA / Lerner et al., 2005 (1117 (52.8));</td>
</tr>
<tr>
<td>Conflict Behavior Checklist (CBQ-20) (Foster &amp; Robin, 1989)</td>
<td>Family well-being</td>
<td>11-17</td>
<td></td>
<td>Hong Kong / Siu &amp; Shek, 2005 (1462 (59));</td>
</tr>
<tr>
<td>Chinese Family Assessment Instrument (C-FAI; Shek, 2002)</td>
<td></td>
<td>11-17 DC</td>
<td>α = .90</td>
<td>Hong Kong / Siu &amp; Shek, 2005 (1462 (59));</td>
</tr>
<tr>
<td>The Wellness Evaluation of Lifestyle Inventory (WEL; Myers et al., 2000)</td>
<td>Wellness</td>
<td>11-15 V</td>
<td>ρ = .84</td>
<td>USA / Briggs et al., 2010 (159 (50.3));</td>
</tr>
<tr>
<td>The revised SSSC (Spiritual Sensitivity Scale for Children (SSSC; Stoyles, 2012)</td>
<td>Spirituality</td>
<td>8-11</td>
<td>α = .79</td>
<td>Australia / Stoyles et al., 2012 (118 (57.6));</td>
</tr>
<tr>
<td>Children’s Hope Scale (CHS; Snyder et al., 1991; 1997)</td>
<td>Hope (pathways: the sense of being able to generate successful plans and to meet goals; agency: the successful determination one has to achieve goals)</td>
<td>8-19 IC</td>
<td>α = .60-.81</td>
<td>Australia / Stoyles et al., 2012 (118 (57.6));</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CC</td>
<td></td>
<td>South Africa / Guse &amp; Vermaak, 2011 (1169 (50.9)); USA / Earhart et al., 2009 (89 (N/A)); Burrow &amp; Hill, 2011 (107 (51)); Burrow et al., 2010 (318 (N/A));</td>
</tr>
<tr>
<td>Measure</td>
<td>Domain</td>
<td>Items</td>
<td>Scale</td>
<td>α</td>
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<tr>
<td>------------------------------------------------------------------------</td>
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<tr>
<td>Hopeful future expectations scale (Schmid, Phelps, &amp; Lerner, 2011)</td>
<td>Hopeful future expectations</td>
<td>11-17</td>
<td></td>
<td>.94-.95</td>
</tr>
<tr>
<td>Thinking About the Future (Lerner et al., 2005)</td>
<td>Future expectations</td>
<td>10-12</td>
<td></td>
<td></td>
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<tr>
<td>Hopelessness Scale for Children (HSC; Kazdin et al. 1983)</td>
<td>Hopelessness</td>
<td>12-16</td>
<td>CC</td>
<td>.82</td>
</tr>
<tr>
<td>The Things I’ve Seen and Heard scale (TISH; Richters &amp; Martinez 1992)</td>
<td>Children’s exposure to violence in the home and community, perceived safety</td>
<td>7-18</td>
<td></td>
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<tr>
<td>The Revised Personal Lifestyle Questionnaire (nutrition subscale) (PLQ; Mahon et al. 2002)</td>
<td>Nutrition</td>
<td>7-18</td>
<td>CS</td>
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<tr>
<td>The Children’s Eating Attitude Test (CHEAT; Maloney, McGuire, &amp; Daniels, 1988; Smolak &amp; Levine, 1994)</td>
<td>Disordered eating</td>
<td>10-17</td>
<td></td>
<td>.82</td>
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<tr>
<td>Child Behavior Checklist (CBCL; Achenbach &amp; Rescorla, 2000)</td>
<td>Aggressive behavior, Problem behavior</td>
<td>0-17</td>
<td>V</td>
<td></td>
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<tr>
<td>Me &amp; My School (M&amp;MS; Deighton et al., 2012)</td>
<td>Emotional difficulties; Behavioral difficulties</td>
<td>8-12</td>
<td>SC</td>
<td>.72-.80</td>
</tr>
<tr>
<td>Vineland Adaptive Behavior Scale (VABS) Screener—Daily Living Skills domain (Sparr et al. 1993)</td>
<td>Behavioral/ Emotional functioning (adaptive behavior)</td>
<td>0-17</td>
<td></td>
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<tr>
<td>Trauma Symptom Checklist for Children (Briere, 1996)</td>
<td>Behavioral/ emotional functioning (trauma)</td>
<td>0-17</td>
<td></td>
<td></td>
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<tr>
<td>The Problem Behaviors Scale (PBS; Farrell et al., 2000)</td>
<td>Negative indicator of adjustment (problem behavior)</td>
<td>15-19</td>
<td></td>
<td>.88-.89</td>
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<tr>
<td>Kaufman Brief Intelligence Test (K-BIT; Kaufman &amp; Kaufman, 2004)</td>
<td>Cognitive development</td>
<td>0-17</td>
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<tr>
<td>Battelle Developmental Inventory, 2nd Edition (BDI-2; Newborg, 2005)</td>
<td>Early cognitive development</td>
<td>0-17</td>
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<tr>
<td>Thriving Orientation Survey (Benson &amp; Scales, 2009)</td>
<td>Purpose</td>
<td>15</td>
<td>a</td>
<td>.76</td>
</tr>
<tr>
<td>Life Engagement Test (LET; Scheier et al., 2006)</td>
<td>Purpose in life</td>
<td>15-19</td>
<td>a</td>
<td>.73</td>
</tr>
<tr>
<td>Youth Purpose scale (Bundick et al. 2006)</td>
<td>Purpose (purpose via exploration, commitment)</td>
<td>14-18</td>
<td>V</td>
<td>.85-.88</td>
</tr>
<tr>
<td>De Jong Gierveld Loneliness Scale (DJGLS; De Jong Gierveld &amp; Kamphuis, 1985)</td>
<td>Loneliness (social and emotional)</td>
<td>15-19</td>
<td>a</td>
<td>.77</td>
</tr>
<tr>
<td>The Social alienation scale (Dodder &amp; Astle, 1980)</td>
<td>Social alienation</td>
<td>14-16</td>
<td>a</td>
<td>.60</td>
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<tr>
<td>Social Skills Rating System (Gresham &amp; Elliot, 1990; Rock &amp; Pollack, 2002)</td>
<td>Sadness/Loneliness</td>
<td>5</td>
<td>a</td>
<td>.61-.75</td>
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<tr>
<td>Fears scale (Lahikainen et al. 2007)</td>
<td>Imagination-related fears, Fear of danger and death, of separation and darkness, of minor injuries and animals, of</td>
<td>11-12</td>
<td></td>
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<tr>
<td>Measure</td>
<td>Description</td>
<td>Items</td>
<td>Scale</td>
<td>Country/Year</td>
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<td>------------------------------------------------------------------------</td>
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<tr>
<td>11 items of children’s worries (Lahikainen et al., 2008)</td>
<td>behavior of significant adults and peers, Fearfulness</td>
<td>11-12</td>
<td>Estonia / Lahikainen et al., 2008 (392 (N/A));</td>
<td></td>
</tr>
<tr>
<td>The child’s behavior in relation to exploration and social relationships 23-item schedule (Lahikainen et al., 2008)</td>
<td>Worries related to family relationships, peer relationships and to parent’s health Behavior orientations (exploration and resilience, interest in new things and people, autonomy, concentration, and tolerance of frustration);</td>
<td>11-12</td>
<td>Estonia / Lahikainen et al., 2008 (392 (N/A));</td>
<td></td>
</tr>
<tr>
<td>Measure of PYD (Lerner et al., 2005)</td>
<td>Positive youth development: Confidence, Competence, Caring, Connection, Character.</td>
<td>9-17</td>
<td>CC CV DV PD DC CS α = .53-.96</td>
<td>USA / Schmid, et al, 2011 (1311 (61)); Urban et al., 2009 (626 (51.4)); Urban et al., 2010 (545 (50.3)); Zimmerman et al., 2008 (1109 (57.5)); Gestsdottir et al., 2010 (2357 (63)); Mueller et al., 2011 (895 (62.7)); Napolitano et al., 2011 (510 (68.4)); Phelps et al., 2009 (1967 (55.9)); Bowers et al., 2012 (710 (68.7)); Gestsdottir &amp; Lerner, 2007 (1659 (54.5)); Schwartz et al., 2010 (5305 (60.3)); China / Shek, 2010 (5054 (N/A); Shek &amp; Ma, 2010 (5649 (46.7));</td>
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<tr>
<td>Chinese Positive Youth Development Scale (CPYDS; Shek, Siu, &amp; Lee, 2007)</td>
<td>Cognitive-behavioral competencies, Prosocial attributes, Positive identity, General positive youth development qualities. Intentional self-regulation skills</td>
<td>11-19</td>
<td>CC CV DV PD DC CS α = .77-.98</td>
<td>USA / Schmid et al., 2011 (1311 (61)); Urban et al., 2009 (626 (51.4)); Urban et al., 2010 (545 (50.3)); Zimmerman et al., 2008 (1109 (57.5)); Gestsdottir et al., 2010 (2357 (63)); Mueller et al., 2011 (895 (62.7)); Napolitano et al., 2011 (510 (68.4)); Phelps et al., 2009 (1967 (55.9)); Bowers et al., 2012 (710 (68.7)); Gestsdottir &amp; Lerner, 2007 (1659 (54.5)); Schwartz et al., 2010 (5305 (60.3)); China / Shek, 2010 (5054 (N/A); Shek &amp; Ma, 2010 (5649 (46.7));</td>
</tr>
<tr>
<td>The Selection, Optimization, and Compensation questionnaire (SOC; Freund &amp; Baltes, 2002)</td>
<td>Mastery goal orientation Prosocial values Self report altruism scale (SRAS; Rushton, Crisjohn, &amp; Fekken, 1981) Multi-Group Ethnic Identity Measure (Phinney, 1992) School engagement (Li &amp; Lerner, 2012 a,b) Single item from the National Promises Study (Scales et al., 2008) School Connectedness Scale (Sánchez, Colón, &amp; Esparza, 2005) The measure of school belonging (Fredricks &amp; Eccles, 2005) School connectedness (sense of belonging, school climate and enjoyment of school)</td>
<td>15</td>
<td>α = .80</td>
<td>USA / Schwartz et al., 2013 (1860 (49));</td>
</tr>
<tr>
<td>Mastery Goal Orientation scale (Anderman, Urda, &amp; Roeser’s, 2005)</td>
<td>Mastery goal orientation</td>
<td>15</td>
<td>α = .80</td>
<td>USA / Schwartz et al., 2013 (1860 (49));</td>
</tr>
<tr>
<td>Monitoring the Future survey (Johnston, Bachman, &amp; O’Malley, 2006)</td>
<td>Prosocial values</td>
<td>15</td>
<td>α = .86</td>
<td>USA / Schwartz et al., 2013 (1860 (49));</td>
</tr>
<tr>
<td>Self report altruism scale (SRAS; Rushton, Crisjohn, &amp; Fekken, 1981)</td>
<td>Prosocial behavior</td>
<td>10-18</td>
<td>α = .82</td>
<td>USA / Morrissey &amp; Werner-Wilson, 2005 (304 (56));</td>
</tr>
<tr>
<td>Multi-Group Ethnic Identity Measure (Phinney, 1992)</td>
<td>Ethnic identity</td>
<td>15</td>
<td>α = .69</td>
<td>USA / Schwartz et al., 2013 (1860 (49));</td>
</tr>
<tr>
<td>School engagement (Li &amp; Lerner, 2012 a,b)</td>
<td>School engagement</td>
<td>13-15</td>
<td>α = .86</td>
<td>USA / Schwartz et al., 2013 (1860 (49));</td>
</tr>
<tr>
<td>Single item from the National Promises Study (Scales et al., 2008)</td>
<td>School connectedness (sense of belonging, school climate and enjoyment of school)</td>
<td>15</td>
<td>α = .82</td>
<td>USA / Schwartz et al., 2013 (1860 (49));</td>
</tr>
<tr>
<td>School Connectedness Scale (Sánchez, Colón, &amp; Esparza, 2005)</td>
<td>School belonging</td>
<td>9-10</td>
<td>α = .76-.88</td>
<td>USA / Earhart et al., 2009 (89 (N/A));</td>
</tr>
<tr>
<td>The measure of school belonging (Fredricks &amp; Eccles, 2005)</td>
<td>School belonging;</td>
<td>11-18</td>
<td>α = .76-.88</td>
<td>Australia / Blomfield &amp; Barber, 2010 (98 (61));</td>
</tr>
<tr>
<td>Single item on future intentions – intention to attend university (Blomfield &amp; Barber, 2010)</td>
<td>Future intentions</td>
<td>11-18</td>
<td>α = .76-.88</td>
<td>Australia / Blomfield &amp; Barber, 2010 (98 (61));</td>
</tr>
<tr>
<td>Single item on Academic Track - Tertiary Entrance Examinations subjects (Blomfield &amp; Barber, 2010)</td>
<td>Academic track;</td>
<td>11-18</td>
<td>α = .76-.88</td>
<td>Australia / Blomfield &amp; Barber, 2010 (98 (61));</td>
</tr>
<tr>
<td>Measure</td>
<td>Domain</td>
<td>Age</td>
<td>Location</td>
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<tr>
<td>Single item on Skipping school</td>
<td>Skipping school</td>
<td>11-18</td>
<td>Australia / Blomfield &amp; Barber, 2010 (98 (61));</td>
<td></td>
</tr>
<tr>
<td>The measure of alcohol use</td>
<td>Alcohol use</td>
<td>11-18</td>
<td>a = .94</td>
<td>Australia / Blomfield &amp; Barber, 2010 (98 (61));</td>
</tr>
<tr>
<td>Eisenberg Sympathy Scale (ESS; Eisenberg et al. 1996)</td>
<td>Sympathy</td>
<td>10-17</td>
<td>USA / Gestsdottir et al., 2010 (2357 (63)); Lerner et al., 2005 (1117 (52.8));</td>
<td></td>
</tr>
<tr>
<td>The Rochester Evaluation of Asset Development for Youth Tool (READY; Klein et al., 2006)</td>
<td>Caring adult relationships; Social skills: self-control, empathy; communication; decision-making</td>
<td>10-19</td>
<td>USA / Klein et al., 2006 (389 (36));</td>
<td></td>
</tr>
<tr>
<td>The EQi:YV-Brief (highly abbreviated version of The Emotional Quotient Inventory, Youth Version, EQi:YV; Bar-On &amp; Parker’s, 2000)</td>
<td>Trait emotional intelligence (intrapersonal, interpersonal, stress management, adaptability)</td>
<td>10-17</td>
<td>Canada / Keefer, Holden, &amp; Parker, 2013 (773 (50.9));</td>
<td></td>
</tr>
<tr>
<td>The Developmental Assets Profile (DAP; Search Institute Minneapolis, 2005)</td>
<td>External assets: support, Empowerment, Boundaries, Constructive use of time; Internal assets: Commitment to Learning, Positive Values, Social Competencies, and Positive identity.</td>
<td>10-18</td>
<td>USA, Japan, Lebanon, Albania, Bangladesh, Philippines / Scales, 2011 (16718 (61.2)); Bangladesh / Scales et al., 2013 (548 (100)); Canada / Strachan, Côte, &amp; Deakin, 2009 (123 (74.8));</td>
<td></td>
</tr>
<tr>
<td>Youth assets scale, adapted from the Search Institutes’ developmental asset framework (Scales &amp; Leffert, 1999)</td>
<td>Assets: Future Aspiration, Internal Control, Empathy, Parental expectation, Parental support, Self-confidence, Positive peer influence, Peer help</td>
<td>10-17</td>
<td>USA / Diehl et al., 2011 (54 (53.7));</td>
<td></td>
</tr>
<tr>
<td>Profiles of Student Life—Attitudes and Behaviors Survey (PSL-AB; Benson, Leffert, Scales, &amp; Blyth, 1998)</td>
<td>Developmental assets, Thriving behaviors, Character, Confidence, Connection,</td>
<td>10-17</td>
<td>USA / Dunn, 2011 (834 (51));</td>
<td></td>
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<tr>
<td>Teen Assessment Project Survey Question Bank (TAP; Small &amp; Rodgers, 1995)</td>
<td>Assets: Barriers to participation, Health-related behavior</td>
<td>10-12</td>
<td>USA / Lerner et al., 2005 (1117 (52.8));</td>
<td></td>
</tr>
<tr>
<td>Target-Based Expectations Scale (TBES; Buchanan &amp; Hughes, 2004)</td>
<td>Internal assets: Prosocial, Difficult, Alienated</td>
<td>10-12</td>
<td>USA / Lerner et al., 2005 (1117 (52.8));</td>
<td></td>
</tr>
<tr>
<td>Personal Strengths Inventory (PSI; Liu, Chow, Tan, &amp; Senf, 2011)</td>
<td>Personal strengths (emotional awareness, emotional regulation, goal setting, empathy, and social competence)</td>
<td>11-16</td>
<td>Singapore / Liu, Chow, Tan, &amp; Senf, 2011 (1008 (52.5));</td>
<td></td>
</tr>
<tr>
<td>Social Responsibility Scale (SRS; Greenberger &amp; Bond, 1984)</td>
<td>Contribution to community and society</td>
<td>10-12</td>
<td>USA / Lerner et al., 2005 (1117 (52.8));</td>
<td></td>
</tr>
<tr>
<td>The Chinese Vengeance Scale (CVS; Stockless &amp; Goranson, 1992)</td>
<td>Emotional quality of life</td>
<td>11-17</td>
<td>Hong Kong / Siu &amp; Shek, 2005 (1462 (59));</td>
<td></td>
</tr>
<tr>
<td>Youth quality of life instrument-research version (YQOL-R; Patrick et al., 2002) (Based on Edwards et al., 2002)</td>
<td>Satisfaction with physical, psychological, social, and functional aspects of life</td>
<td>12-18</td>
<td>USA / Patrick et al., 2002 (116 (N/A));</td>
<td></td>
</tr>
<tr>
<td>The Quality of Life Profile Adolescent Version (QOLPAV; Raphael et al. 1996)</td>
<td>Physical, psychological and spiritual being, Physical, social and community belonging,</td>
<td>13-18</td>
<td>Taiwan / Chen &amp; Lin, 2013 (1392 (45.8));</td>
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</table>
The World Health Organization Quality of Life scale (WHOQOL; World Health Organization, 1995)

World Health Organization Quality of Life scale (WHOQOL-100; Fidaner, Elbi, Fidaner, Eser, & Eser, 1999)

World Health Organization Quality of Life scale (WHOQOL-BREF; World Health Organization, 1996, 1998)

Quality of life questionnaire (Jirojanakul & Skevington, 2000)

Based on The World Health Organization Quality of Life Assessment, WHOQOL-100 (WHOQOL; World Health Organization, 1995).

The Pediatric Quality of Life Inventory (PedsQL; Varni et al., 2001)

Generic self-administered measure for adolescents (Vécu et Santé Perçue des Adolescents) (VSP-A; Simeoni et al., 2000; Sapin, Simeoni, El Khammar, Antoniotti & Auquier, 2005)

KINDL (Bullinger, 1994; Ravens-Sieberer, & Bullinger, 1998)

KINDL-R (Ravens-Sieberer & Bullinger, 1998; Ravens-Sieberer, 2003)

Kid-KINDL (Ravens-Sieberer & Bullinger, 1998)

Practical, leisure and growth becoming

Physical domain, Psychological domain, Social relationships domain, Environment domain.

16

α = .79

Bosnia / Pranjić et al., 2007 (356 (54));

Turkey / Cilga, 2010 (243 (50.2));

10-19

CS

DC

CN

α = .68-.83

Taiwan / Chen et al., 2006 (365 (49.6));

India / Agnihotri et al., 2010 (515 (48.2));

Australia / Correa-Velez, Gifford, & Barnett, 2010 (97 (49));

5-8

FC

CC

α = .89

Thailand / Jirojanakul et al., 2003 (498 (57));

Health related QOL: Physical functioning, Emotional functioning, Social functioning, Pre-school/School functioning

5-19

CV

CS

DC

CN

α = .65-.91

USA / Young et al., 2013 (219 (56.4));

Lavigne et al., 2012 (233 (56.2));

Serbia / Stevanovic, 2013 (237 (54.9));

Stevanovic et al., 2011 (238 (55));

Taiwan / Lin et al., 2012 (479 (46.3));

Norway / Reinfjell et al., 2006 (32 (56));

Australia / Cook et al., 2008 (332 (N/A));

Finnland / Laaksonen et al., 2007 (1097 (52));

Nethererlands / De Bruin et al., 2011 (717 (48.7));

Overall Health related QOL/well-being: Vitality, Psychological well-being, Relationship with friends, parents, teachers, medical staff, Leisure activities, Physical well-being, School performance, Body image

10-18

CS

DC

CN

CV

α = .74-.91

Spain / Serra-Sutton et al., 2009 (555 (50.8));

France / Simeoni et al., 2000 (2941 (52.3));

Sapin, Simeoni, El Khammar, Antoniotti, & Auquier, 2005 (1758 (52.5));

Health related QOL: Physical well-being, Emotional well-being, Self-esteem, Family, Friends, and School/everyday functioning

8-18

CS

CV

DC

α = .80-.87

Taiwan / Lin, Luh, Cheng, Yang, & Ma, 2013 (443 (52.8));

Spain / Serra-Sutton et al., 2009 (555 (50.8));

Germany / Erhart et al., 2009 (6813 (48.7));

Norway / Helseth & Lund, 2005 (239 (53.6));

USA / Patrick et al., 2002 (116 (N/A));

Serbia / Stevanovic, 2009 (303 (47.2));

Singapore / Wee et al., 2007 (328 (67));

Taiwan / Lin et al., 2013 (443 (52.8));
<table>
<thead>
<tr>
<th>Scale/Study</th>
<th>Domain</th>
<th>Cutoff</th>
<th>Pearson's r, Cronbach's α</th>
<th>Countries/Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kiddo-KINDL</strong> (Ravens-Sieberer &amp; Bullinger, 1998)</td>
<td>12-16 CV, CS, DC</td>
<td></td>
<td></td>
<td>Serbia / Stevanovic, 2009 (261 (56.3));</td>
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<td>Singapore / Wee et al., 2007 (328 (67));</td>
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<td>Taiwan / Lee et al., 2008 (1081 (46.8));</td>
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<tr>
<td><strong>KIDSCREEN 52 / 27 / 10</strong> (Ravens-Sieberer et al., 2001, 2005)</td>
<td>8-18 CS, CT, CV</td>
<td></td>
<td></td>
<td>UK / Clarke et al., 2011 (1650 (50.1));</td>
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<tr>
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<td></td>
<td>Miller et al., 2013 (1081 (47.2));</td>
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<td></td>
<td>Axford &amp; Hobbs, 2011 (5000 (N/A));</td>
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<td>Austria, Czech Republic, Hungary, Ireland, Poland, Spain, Sweden, Switzerland, the Netherlands, UK / Ravens-Sieberer et al., 2007 (22827 (52.5)); Ravens-Sieberer et al., 2010 (22830 (52)); Norway/ Haraldstad, Christophersen, Eide, Natvig, &amp; Helseth, 2011 (1066 (54)); South Africa / Taliep &amp; Florence, 2012 (565 (61.6)); Austria, France, Germany, Spain, Switzerland, Germany, Spain, France, Netherlands, Austria, UK, Switzerland, Hungary, Czech Republic, Poland / Ottova et al., 2012 (13041 (52.6)); Austria, Switzerland, Germany, Spain, France, United Kingdom, the Netherlands / Robitail et al., 2006 (3988 (51.9)); Von Rueden et al., 2006 (1897 (52)); Spain / Villalonga-Olives et al., 2010 (423 (51.8)); Rajmil et al., 2013 (418 (48.1)); Australia / Mathers et al., 2009 (1662 (48.9)); Stevens &amp; Ratcliffe, 2012 (630 (45.3)); USA / Valois et al., 2004a (4758 (53.2)); Zullig et al., 2005b (4917 (52.6));</td>
</tr>
<tr>
<td><strong>Healthy days / Health Related Quality of Life Scale</strong> (CDC-HRQOLS; Hennessy et al., 1994; Centre for Disease Control, 2000)</td>
<td>13-18 FC, CS, CV</td>
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<td>USA / Valois et al., 2004a (4758 (53.2)); Zullig et al., 2005b (4917 (52.6));</td>
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<tr>
<td><strong>The Child Health Utility 9D</strong> (CHU9D; Stevens, 2009; 2010)</td>
<td>11-17 FC, CS, CV</td>
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<td></td>
<td>Health related QoL: Moods / emotions, School Work / Homework, Sleep, Daily routine, Ability to join in activities</td>
</tr>
<tr>
<td><strong>The SF-10 for Children™</strong> (Landgraf et al., 1996; Turner-Bowker et al., 2003)</td>
<td>7-18 FC, CS, CV</td>
<td></td>
<td></td>
<td>USA / Zhang et al., 2008 (279 (53)); Scotland ,UK / Lauder et al., 2010 (1787 (52.7));</td>
</tr>
<tr>
<td><strong>The Child Health Questionnaire</strong> (CHQ; Landgraf et al., 1996, 1999; Raat et al., 2002; Wulffraat et al., 2001)</td>
<td>10-16 CN, CS, CV</td>
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<td>Health related QoL: General health, Mental health, Self-esteem, Behavior</td>
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<tr>
<td>Instrument</td>
<td>Domain</td>
<td>Items</td>
<td>Validity Type</td>
<td>Reliability</td>
</tr>
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<td>--------------------------------------------------------</td>
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<tr>
<td>The Infant Toddler Quality of Life Questionnaire (ITQOL; Abetz, 1994; Klassen et al., 2002)</td>
<td>Health related QoL: Infant concepts; Parent concepts</td>
<td>3-4</td>
<td>α = .80-.96</td>
<td>Canada / Klassen et al., 2003 (N/A (N/A));</td>
</tr>
<tr>
<td>Preschool Children Quality of Life questionnaire (TAPQOL; Fekkes et al., 2000; Bunge et al., 2005)</td>
<td>Health related QoL: Physical, Social, Cognitive, and Emotional functioning</td>
<td>0-3</td>
<td>CS α &gt; .70</td>
<td>Spain / Rajmil et al., 2011 (228 (46.1));</td>
</tr>
<tr>
<td>4 items for HRQoL indicators (Centers for Disease Control and Prevention, 2000; Moriarty et al., 2005; Moriarty et al., 2003)</td>
<td>Health-Related Quality of Life</td>
<td>12-17</td>
<td>CS CT PD</td>
<td>USA / Dube et al., 2013 (4848 (49.6));</td>
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<tr>
<td>Seven items describing psychosomatic indicators of subjective well-being (Lahikainen et al., 2008)</td>
<td>Psychosomatic symptoms</td>
<td>11-13</td>
<td>α = .74</td>
<td>Estonia / Lahikainen et al., 2008 (392 (N/A));</td>
</tr>
<tr>
<td>Giessener Complaint Questionnaire for Children and Adolescents (Brähler, 1992)</td>
<td>Somatic complaints</td>
<td>9-19</td>
<td>α = .74</td>
<td>Germany / Walper, 2009 (358 (54.5));</td>
</tr>
<tr>
<td>General Health Questionnaire (GHQ12; Goldberg &amp; Williams 1988)</td>
<td>Mental health</td>
<td>8-17</td>
<td>α = .77-.80</td>
<td>UK / Phillips, Hagan, Bodfield, Woodthorpe, &amp; Grimsley, 2008 (43 (51));</td>
</tr>
<tr>
<td>Duke Health Profile (DHP; Arene et al., 1998)</td>
<td>Physical health, Mental health, Social health, General health, Perceived health, Self-esteem, Anxiety, Depression, Pain, Disability</td>
<td>12-19</td>
<td>CS α = .80-.92</td>
<td>Australia / Delfabbro et al., 2013 (2522 (58.8)); Vietnam / Vo et al., 2005a (1408 (50.1)); Vo et al., 2005b (1408 (50.1));</td>
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<tr>
<td>The ISF:8 and the ISF:16 (Jokovic et al., 2006) (Short forms of Child Perceptions Questionnaire (CPQ; Jokovic et al., 2002; 2004)</td>
<td>Child oral health Quality of life (COHQoL): Oral symptoms, Functional limitations, Emotional wellbeing, Social wellbeing, School interaction, Recreation activities</td>
<td>11-14</td>
<td>CT CS DC α = .70-.84</td>
<td>Brazil / Torres et al., 2009 (136 (58.8));</td>
</tr>
</tbody>
</table>

Note: CC - concurrent validity, CS - construct validity, CT - criterion validity, CN - content validity, PD - predictive validity, CV - convergent validity, DV - divergent validity, DC - discriminant validity, FC - face validity, IC - incremental validity, SC - structural validity, V - the type of validity was not indicated; α - internal consistency reliability coefficient; rho - test-retest reliability coefficient; N/A – information is not available.
References of reviewed articles


