Appendix 1: Search terms

Key search term	Synonyms
Optimism	Optimistic OR hopeful OR hopefulness OR hope OR positiveness OR cheerfulness OR positivity
AND	
Adolescent*	Child* OR young people OR teen* OR youth*
AND	
Measure*	Tool* OR test* OR scale OR assessment

Appendix 2: Characteristics of Included studies

Study characteristics					Measures Used	Psychometric properties			
						Reliability		Validity	
Author (year)	Country	Study design	Population involved	Sample size Age in years (range, mean (sd)) Sex		Internal consistency	Test-retest /inter & intra-rater reliability	Validity assessed	Validity indices
Abler (2017)	South Africa	Development and validation	Young women enrolled in an HIV-prevention trial	2,522 13-20 (15.5 (1.7)) F	New 12-item Hope Scale	.95	NR	Construct validity Convergent validity	Single factor solution with high factor loadings (>0.7) Expected significant correlation with grade (0.10), anxiety (-0.15), depression (-0.35), social support (0.12), condom use self-efficacy (0.15), having ever been pregnant (-0.13), alcohol use (-0.04)
Abu-Kaf (2017)	Israel	Cross-sectional	Adolescents exposed to violence	169 11-18 (16.48 (1.14)) M & F	Staats's Hope Index	.85 – .95 across samples	NR	NR	NR
Adamson (2011)	South Africa	Cross-sectional	Orphans and non-orphans	81 8-16 M&F	Children's Hope Scale (CHS)	NR	NR	Cross-cultural adaptation	Scale translated from English to Xhosa and then back to English
Adela (1994)	USA	Cross-sectional	Students	99 15-17 (16.06 (0.77)) M&F	Hopefulness Scale for Adolescents	.90	NR	NR	NR
Adelabu (2008)	USA	Cross-sectional	Students	661 12-20 (15.0) M&F	Snyder's Hope Scale The Zombardo Time Perspective Inventory - future subscale	.66 & .74 for agency and pathways subscales, respectively .62 – .71	NR	NR	NR
Adibshereski (2020)	Iran	Cross-sectional	Students with hearing loss	122 6th-9th graders M&F	EPOCH	.75	NR	NR	NR
Ahn (2015)	South Korea	Cross-sectional	Students	370 14-18 (15.85 (0.77)) M&F	Career-related Planned Happentance Skills Scale (CPHS) – Optimism Subscale	.70 for the Optimism Subscale	NR	Convergent validity	Positive correlation between the scale and occupational engagement (0.46, p < 0.001)

								Discriminant validity	Negative correlation with anxiety (-0.34, p < 0.001)
Aidan (2021)	Israel	Cross-sectional	Adolescents in out-of-home placement placements	213 16-19 (17.50 (0.88)) M&F	Children's Hope Scale (CHS)	.90	NR	NR	NR
Akhtar (2010)	UK	Trial	Alcohol- misusing adolescents	20 14-20 (17.5) M&F	Life Orientation test – Revised (LOT-R)	NR	NR	NR	NR
Al-Said (2018)	Israel	Cross-sectional	Students	910 13-18 M&F	Staats's Hope Index	.93 for overall sample, .93 – .94 across samples	NR	NR	NR
Amit (2017)	Malaysia	Cross-sectional	General adolescent population	263 12-24; 71.9% aged 12-20 M&F	The Reasons for Living Inventory for Adolescents (RFL-A) – Future Optimism Subscale	.97	NR	NR	NR
Amirkhan (1995)	USA	Cross-sectional	Students	100 19.2 M&F	The Optimism and Pessimism scale	.55	NR	NR	NR
Anderson (2016)	USA	Cross-sectional	Students	491 4th-11th graders M&F	Children's Hope Scale (CHS)	.82	NR	NR	NR
Andretta (2014)	USA	Cross-sectional	Students	300 12-19 (16.0 (1.25)) M&F	Adolescent Time Attitude Scale (ATAS)	.83 for future positive subscale	NR	NR	NR
Anila (2018)	Pakistan	Development and validation	Students	400 14-17 (15.53 (1.12) M&F	Anila Positive Psychological Capital Scale (APS)	.84 for the overall scale; .67 and 0.7 for hope and optimism subscales, respectively	NR	Construct validity	EFA yielded a 4-factor structure (resilience, self-efficacy, hope, optimism) that accounted for 47.87% of the total variance
								Convergent validity	Positive relationships between the hope and optimism subscales and measures of happiness (0.16 & 0.24), optimism (0.37 & 0.39, p < 0.01), and hope (0.46, p<0.01)
								Divergent validity	Weak or insignificant association between the subscales and measures of self-esteem (0.24 & 0.20, p < 0.05, extraversion (0.27& 0.25, p < 0.05, and agreeableness (0.06 & 0.11)

						NR	NR	NR	NR
					Herth Hope Index				
					Life Orientation test (LOT)	NR	NR	NR	NR
Ansari (2018)	Iran	Cross-sectional	Students	1,094 High Schoolers M&F	Optimism Questionnaire	.92	NR	Content validity	Content validity index of 0.88
Araban (2015)	Iran	Cross-sectional	Students	600 15-18 (16.7 (0.87)) M&F	Snyder's Hope Scale	.78	NR	NR	NR
Arbel (2018)	USA	Cohort	General adolescent population	103 18.06 M&F	16-item Positive Thinking Scale	.80	NR	NR	NR
Archer (2007)	Sweden	Cross-sectional	Students	122 17-19 M&F	Life Orientation Test (LOT)	NR	NR	NR	NR
Archer (2019)	USA	Cohort	Students	991 10-19 (14.19 (2.05)) M&F	Children's Hope Scale (CHS)	83 –7	NR	NR	NR
Arnau (2010)	Peru	Validation	Students	315 16-33 (19.7 (2.63)) M&F	Herth Hope Index	89 for overall scale, .74 – .82 for subscales	NR	Cross-cultural adaptation Construct validity	Scale forward-translated to Spanish and back-translated to English Four-factor solution that accounted for 38.6% of the total variance
Arpawong (2013)	USA	Cross-sectional	Cancer survivors	94 11-21 M&F	Life Orientation Test – Revised (LOT-R)	.77	NR	NR	NR
Arunkumar (1999)	USA	Cohort	Students	475 5th&6th graders M&F	New 5-item Hopefulness Scale	4 &75 across time points	NR	NR	NR
Ashby (2010)	USA	Cross-sectional	Students	153 11-15 (12.9) M&F	Children's Hope Scale (CHS)	.83	NR	NR	NR
Ayub (2009)	Pakistan	Validation	Students	723 17-25 (19.47 (2.0)) M&F	Life Orientation test (LOT)	.54 & .55 for the optimism and pessimism subscales, respectively	NR	Construct validity Convergent validity	PCA yielded a 2-factor structure accounting for 43.17% of the total variance Negative correlation between optimism subscale with suicidal ideation; and positive correlation between pessimism subscale with suicidal ideation

								Cross-cultural adaptation	Scale forward translated to Urdu and back translated to English
Ayyash-Abdo (2016)	Lebanon	Cross-sectional	Students	559 11-19 (15.0 (1.67)) M&F	Children's Hope Scale (CHS)	.68 for the overall scale, .55 & .65 for subscales	NR	Construct validity	PCA yielded a 2-factor structure that explained 54.18%
Azadianbojnordi (2020)	Iran	Cross-sectional	Students	353 18.0 (1.4) M&F	Academic Hope Scale	.91	NR	NR	NR
Bahena (2020)	USA	Cross-sectional	Immigrant Latino adolescents	2369 14-17 M&F	Children's Hope Scale (CHS)	.85	NR	Construct validity Measurement invariance	One-factor structure with good model fit: $x^2 = 41.80$, df = 8, $p < 0.001$; RMSEA = 0.062, CFI = 0.99) Full invariance across immigrant and documentation status (first vs second vs third generation immigrants), partial strong invariance by gender
Bajaj (2018)	USA	Cross-sectional	Students	113 18.7 (1.03) M&F	Life Orientation Test – Revised (LOT-R)	.73 – .84	NR	NR	NR
Balaguer (2021)	Spain	Cross-sectional	Students	1507 12-18 M&F	Youth Life Orientation Test (YLOT)	.62 for Optimism & .78 for Pessimism subscales	NR	NR	NR
Baldwin (2007)	USA	Cross-sectional	Students	63 19.6 (1.38) M&F	Life Orientation Test (LOT)	NR	NR	NR	NR
Bennet (2008)	USA	Cross-sectional	Youths with cystic fibrosis	87 7-18 (13.1 (3.8)) M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Ben-Zur (2002)	Israel	Cross-sectional	Students	185 15-17 (16.06 (0.84)) M&F	Life Orientation Test (LOT)	.72	NR	NR	NR
Berg (2008)	USA	Trial	Students	172 19.17 (2.02) M & F	Trait Hope Scale	.86	NR	NR	NR
Berg (2013)	USA	Cross-sectional	At-risk youth in foster care	70 13-17 (14.74 (1.14)) M&F	Snyder's Hope Scale	.77	NR	NR	NR
Berger (2009)	Sri Lanka	Trial	Students	166 9-15 M&F	Children's Hope Scale (CHS)	.64	NR	NR	NR

Study	Country	Design	Population	Sample	Measure	Reliability		Validity	Validity results
Bernado (2015)	Philippines	Validation	Students	825 12-15 M&F	Locus-of-Hope Scale	NR	NR	Construct validity Measurement invariance	CFA indicated a good fit for the 4-factor structure: $x^2 = 897.55$, df =430; p = 0.001, $x^2/df = 2.09$; CFI = 0.93; TLI = 0.92; RMSEA = 0.04 The 4-factor model showed strong measurement invariance across sex
Bharathi (2015)	India	Cross-sectional	Students	358 16.5 M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Bissell-Havran (2015)	USA	Cross-sectional	Students	193 13 years M&F	Snyder's Hope Scale	NR .91	NR	NR	NR
Blanca (2017)	Spain	Cross-sectional	Students	457 11-14 (12.28 (0.68)) M&F	Values in Action Inventory of Strengths for Youth (VIA-Youth)	.74 for Hope Subscale	NR	NR	NR
Blaze (2009)	USA	Cross-sectional	Students	636 16.58 (1.20) M&F	Life Orientation Test – Revised (LOT-R)	.78	NR	NR	NR
Boman (2001)	Australia	Cross-sectional	Students	102 12-14 M&F	Extended Life Orientation Test (ELOT)	.71	NR	NR	NR
Bowers (2012)	USA	Cohort	Students	1,700 15.77 (0.99) M&F	2 items	.81 – .84 (Omega)	NR	NR	NR
Braathen (1992)	Norway	Cross-sectional	Adolescents engaged in sports	228 15-16 M&F	Life Orientation Test (LOT)	NR	NR	NR	NR
Braun-Lawensohn (2017)	Israel	Cross-sectional	Adolescents from different religious groups	385 12-18 M&F	Staats's Hope Index	.86 & .95 across samples	NR	NR	NR
Braun-Lewensohn (2010)	Israel	Cross-sectional	Adolescents in an acute stress situation	222 12-18 M&F	Staats's Hope Index	.86 – .95	NR	NR	NR
Braun-Lewensohn (2018)	Israel	Cross-sectional	Refugees	110 13-18 (15.48 (1.35)) M&F	Staats's Hope Index	.88 –.98	NR	NR	NR
Brewin (1996)	UK	Cross-sectional	Students	1st year undergraduates M&F	Life Orientation Test (LOT)	.88	NR	NR	NR
Bronk (2009)	USA	Cross-sectional	Students	153 14.0 (1.7) M&F	Trait Hope Scale	.87 & .86 for subscales	NR	NR	NR

Brooks (2016)	USA	Cross-sectional	Marginalized adolescents	256 14-19 M&F	3-item Hope Measure by Lippman et al., 2014	.81	NR	NR	NR
Bryan (2004)	USA	Cross-sectional	Incarcerated adolescents	150 13-17 (16) M&F	New 4-item Optimism Scale	.70	NR	Construct validity	CFA indicated a one-factor structure: x^2 (2, N = 147) = 11.15, $p < 0.01$, CFI = 0.93
Bryant (2003)	USA	Cross-sectional	Students	86 19.4 (2.2) M&F	Life Orientation Test (LOT)	NR	NR	NR	NR
Bryce (2020)	USA	Cross-sectional	Students	643 5th-12th graders M&F	Children's Hope Scale (CHS) Intentional Self-regulation Questionnaire	.85 & .92 across grades .62 - .78 across subscales	NR	NR	NR
Buckelew (2008)	USA	Cross-sectional	Students	135 19.3 (2.6) M&F	Snyder's Hope Scale	.76 for overall scale, .72 & .64 for subscales	NR	NR	NR
Burešová (2020)	Czech Republic	Cross-sectional	Students	1,239 12-19 (15.56 (2.14)) M&F	Life Orientation Test – Revised (LOT-R)	.69	NR	NR	NR
Burnside (2019)	USA	Cohort	Ethnic Minority Adolescent Male Offenders	831 14-18 (16.06 (1.17)) M	Adapted version of the Perceptions of Chances for Success Measure	.81	NR	NR	NR
Burris (2009)	USA	Cross-sectional	Students	353 17-19 (19.8 (1.31)) M & F	Life Orientation Test – Revised (LOT-R)	.84	NR	NR	NR
Cabrita (2014)	Portugal	Cross-sectional	Athletes	153 13-25 (17.9 (2.8)) M&F	Time Attitude Scale (TAS)	.89	NR	NR	NR
Callina (2014)	USA	Cross-sectional	Students	1432 13.02 (0.53) M&F	Hopeful Future Expectations Scale	.61 - .70 across time points	NR	Measurement invariance	Scale showed weak and configural invariance across waves (time points)
Cameron (1998)	USA	Cross-sectional	Students	122 18.0 M&F	Life Orientation Test (LOT)	NR	0.86	NR	NR
Canfield (2018)	USA	Development and validation	Urban adolescents	246 16.1 (1.37) M&F	Urban Adolescent Hope Scale (UAHS)	.96 for the overall scale. .88 - .94 across subscales	NR	Face and content validity	Experts assessed the scale's content and face validity; modifications were made following their feedback 5-factor structure with acceptable model fit: x^2 =

								Construct validity	784.5; df = 242; p = 0.000; x²/df = 3.242; RMSEA = 0.094; TLI = 0.96; CFI = 0.97; SRMR = 0.074
								Convergent validity	Significant negative correlations between the scale and trash, graffiti, abandoned buildings and crime
Cantrell (2004)	USA	Cross-sectional	Adolescents with cancer and comparison peers	90 12-18 (14.98 (1.67)) M&F	Hopefulness Scale for Adolescents	NR	NR	NR	NR
Canty-Mitchell (2001)	USA	Cross-sectional	Inner-city adolescents	202 15.92 (1.29) M&F	Miller Hope Scale	.92	NR	NR	NR
Caprara (2006)	Italy	Cohort	Students	664 16.73 (1.17) M&F	Life orientation Test (LOT)	.74 & .81 across time points	NR	NR	NR
Carmona-Halty (2019)	Chile	Cross-sectional	Students	407 12-18 M&F	Academic Psychological Capital Questionnaire	.91	NR	Cross-cultural adaptation	Scale translated to Spanish following the recommended guidelines
Carnelly (1992)	USA	Cross-sectional	Students	119 18.5 M&F	2 items	.68 & .84	NR	NR	NR
Carreres-Ponsoda (2017)	Spain	Trial	Students	30 16-18 (16.8) M&F	Emotional Quotient Inventory – General Mood Subscale	.84	NR	NR	NR
Carvajal (2000)	USA	Cross-sectional & Cohort	Students	3,282 11-15 (12.3) M&F	7-item Life Orientation Test (LOT) Children's Hope Scale (CHS)	.69 – .74 .86 – .88	NR	NR	NR
Carvajal (2012)	USA	Cohort	Students	744 12.0 M&F	8 items adapted from the LOT, LOT-R and the Children's Hope Scale	.87 – .90 across time points	NR	Construct validity	One-factor structure fit the data adequately: CFI = 0.98; GFI = 0.98; RMSEA = 0.05
Cedeno (2010)	USA	Cross-sectional	Low- income African American youth	132 10.2 (0.6) M&F	Children's Hope Scale (CHS)	.95	NR	Construct validity	The two factors were highly intercorrelated: r = 0.65; p < 0.1)
Celik (2015)	Turkey	Cross-sectional	Male junior soccer players	1169 9-15 (12.32 (1.17)) M	Children's Hope Scale (CHS)	.93	NR	NR	NR
Cenk (2016)	Turkey	Cross-sectional	Students	1,353 14-18 M&F	Life Orientation Test (LOT)	.64 & .68 for subscales	NR	NR	NR

Chadwick (2016)	USA	Trial	Students	127 19.5 (1.63) M&F	1 item	NR	NR	NR	NR
Chan (2018)	China	Cohort	Adolescents from low-income families	902 18.3 M&F	Snyder's Hope Scale	NR	NR	NR	NR
Chang (1996)	USA	Cross-sectional	Latina Adolescents	283 18.7 (2.0) M&F	Extended Life Orientation Test (ELOT)	.81 & .92 for the optimism and pessimism subscales (omega)	0.73 & 0.84 for the optimism and pessimism subscales, respectively	NR	NR
Chang (2003)	USA	Cross-sectional	Students	263 14-19 (15.73 (0.98)) M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Chaves (2013)	Spain	Cross-sectional	Children with a life-threatening illness	67 7-18 (12.30 (2.86)) M&F	Youth Life Orientation Test (YLOT)	.80	NR	NR	NR
Cheavens (2019)	USA	Validation	Students	280 Sample 1 = 18-33 18.97 (1.72) Sample 2 = 18-23 18.86 (1.14) M&F	Snyder's Hope Scale	.83 for overall scale; .78 and .73 for the subscales in sample 1 .82 for overall scale; 0.82 and 0.72 for the subscales in sample 2 .86	Interrater .73 – .95 in sample 1 .60 – .82 in sample 2	Predictive validity	Hope scores predicted setting objectively important, prosocial, long-term and challenging goals as predicted
					Life Orientation Test (LOT)		NR	NR	
Chen (2008)	China	Trial	Adolescent volleyball players	139 16-18 (16.3 (0.8) M&F	Life Orientation Test (LOT)	.77	NR	NR	NR
Chen (2016)	China	Cross-sectional	Students	668 16.53 (1.81) M&F	Life Orientation Test (LOT)	.83	NR	NR	NR
Chen (2018)	China	Cross-sectional	Academically gifted students	484 15.45 (0.70) M&F	Trait Hope Scale	.69 & .67 for subscales	NR	NR	NR
Chen (2020)	Taiwan	Cohort	Students	1035 13.2 (0.3) M&F	Inventory of Adolescent Resilience - Hope	NR	NR	NR	NR

Author (year)	Country	Design	Population	Sample (N, age, sex)	Measure	Reliability		Validity type	Validity findings
					and Optimism Subscale				
Cheng (2014)	USA India Nigeria South Africa China	Cross-sectional	Adolescents in Vulnerable Environments	2,393 15-19 M&F	3-item Hope Measure by Lippman et al., 2014	.70 – .89 across countries	NR	NR	NR
Cherewick (2016)	DRC	Cross-sectional	Trauma- affected youth	399 12.8 (1.8) M&F	The Doucette and Bickman's Hopefulness Scale – Youth Version	NR	NR	NR	NR
Cheueng (2013)	USA UK	Cross-sectional	Students	254 Sample 1 = 17-41 (18.95 (2.16)) Sample 2 = 18-42 (19.38 (3.42)) M&F	4 items Life Orientation Test – Revised (LOT-R)	.90 .85	NR	NR	NR
Chiang (2019)	USA	Cohort	General adolescent population	248 18.37 (0.51) M&F	Life Orientation Test – Revised (LOT-R)	.83	NR	NR	NR
Choi (2021)	USA	Validation	Adolescents from disadvantaged backgrounds	3,444 15 M&F	EPOCH	.80	NR	Construct validity Convergent validity	CFA supported the hypothesized first-order (x^2=956.5, df=160, p=0.000, RMSEA = 0.038, SRMR = 0.038, CFI=0.942, TLI=0.931) and second-order 5-factor structure (x^2 = 1073.296, df=165, p=0.000, RMSEA = 0.040, SRMR = 0.041, CFI=0.934, TLI=0.924). The overall EPOCH scale and optimism subscale were also associated as expected with adolescents' depression (-0.46, -0.39, p < .001), anxiety (-0.21, -0.25, p < .001), behavior problems (-0.14, -0.13, p < .001), delinquency (-0.11, -0.09, p < .001), school connectedness (0.44, 0.33, p < .001), and social skills (.37, 0.24, p < .001)
Chong (2006)	Singapore	Cross-sectional	Students	519 13.50 (0.73) M&F	Life Orientation Test (LOT)	.60	NR	NR	NR
Chui (2017)	China	Cross-sectional	Students	1580	Beck Hopelessness Scale	.71	NR	NR	NR

				10-19 (14.15) M & F					
Cikrikci	Turkey	Cross-sectional	Students	201 14-19 (16.09 (1.09) M&F	Life Orientation Test (LOT)	.71	NR	NR	NR
Clark (2006)	USA	Cross-sectional	Inner- city black youth	172 11.5 (1.3) M&F	Perceived Life Chances Scale	.81	NR	NR	NR
Colombo (2006)	Italy	Cross-sectional	Students	348 17-22 (18.3) M&F	Attributional Style Questionnaire	NR	NR	NR	NR
Connelly (1998)	USA	Cross-sectional	Pregnant adolescents	149 14-18 F	Hopefulness Scale for Adolescents	.86	NR	NR	NR
Cotter (2016)	USA	Cohort	Students	21,199 12.7 M&F	Future Optimism Scale	.97	NR	NR	NR
Covell (2011)	UK	Cohort	Students	143 9-11 (10.8) M&F	3 items	NR	NR	NR	NR
Creed (2002)	Australia	Validation	Students	504 12-18 (14.96 (1.52)) M&F	Life Orientation Test – Revised (LOT-R)	.60 for the overall scale; .62 & .78 for subscales	NR	Construct validity	EFA yielded 2 factors explaining 62.1% of the total variance; CFA confirmed the 2-factor model as having a good fit: GFI = 0.99, AGFI = 0.96, IFI = 0.99, NFI = 0.97, TLI = 0.98, CFI 0.99, RMSEA = 0.04
Creswell (2005)	USA	Cross-sectional	Students	85 17-133 (19.57) M&F	Life Orientation Test (LOT)	NR	NR	NR	NR
Currier (2009)	USA	Cross-sectional	Children with cancer	79 8-18 (12.9 (3.2)) M&F	Youth Life Orientation Test (YLOT)	72	NR	NR	NR
D'Angelo (2019)	USA	Cohort	Adolescents with chronic illnesses	128 12-18 (14.7 (1.8)) M&F	Multidimensional Measure of Children's Perception of Control (MM-CPC)	.74 & .83 across subscales	NR	NR	NR
Danoff-Burg (2004)	USA	Cross-sectional	Students	100 19.14 (2.22) M&F	Snyder's Hope Scale	.84 for overall scale, .80 & .73 for subscales	NR	NR	NR
Datu (2017)	Philippines	Cross-sectional	Students	444 18.43 (1.46) M&F	Locus-of-Hope Scale	.79 – .97 for subscales	NR	NR	NR

Daukantaite (2005)	Sweden	Cohort	Adolescent girls	297 13.0 F	Attitude to the Future Scale	.89	NR	NR	NR
Davis-Maye (2007)	USA	Cross-sectional	African-American adolescent girls	866 9-19 (13.56) F	17 items	.69	NR	NR	NR
de Beaudrap (2017)	USA	Cross-sectional	Female athletes	83 19.33 (1.5) F	Life Orientation Test (LOT)	.85	NR	NR	NR
Demirci (2019)	Turkey	Cross-sectional	Students	381 14-18 (15.63 (1.12)) M&F	Character Growth Index	.90 for overall scale, .78 for optimism subscale	NR	NR	NR
Demirci (2020)	Turkey	Cross-sectional	Students	322 11-15 (13.01 (0.92) M&F	Children's Hope Scale (CHS)	.82	NR	NR	NR
Demirtas (2019)	Turkey	Cross-sectional	Students	353 11-13 (12.13) M&F	Children's Hope Scale (CHS)	.74	NR	NR	NR
Denny (2002)	USA	Trial	Students	1,195 Upper elementary, middle/junior high and high school students M&F	Hopelessness Scale for Children	.62	NR	NR	NR
Deptula (2006)	USA	Cross-sectional	Students	121 11.14 M&F	Revised Peer Life Orientation Test (PLOT-R)	.83 for overall scale, .73 & .72 for subscales	.54 for overall scale, .45 & .43 for subscales	Construct validity	A 3-factor hierarchical solution was found to match best: $\chi 2$ (34, N = 232) = 59.30, NFI = 0.90, CFI = 0.95)
DesRoches (2014)	Canada	Cohort	Students	2,270 10th-12th graders M & F	Life Orientation Test (LOT)	NR	NR	NR	NR
Dewberry (1990)	UK	Trial	Students	99 18.0 M&F	38 items	NR	NR	NR	NR
Dew-Reeves (2012)	USA	Validation	Youth receiving mental health services	356 11-18 M&F	Children's Hope Scale (CHS)	.87	NR	Construct validity Convergent validity	CFA supported a one-factor structure (CFI = 0.97, GFI = 0.97, SRMR = 0.03) Significant correlations with youth symptom severity (-0.14 - -0.37), youth treatment outcome expectations (0.22), youth satisfaction with life

								(0.39), caregiver treatment outcome expectations (0.07) or caregiver life satisfaction (0.05)
Di Giacomo (2019)	Italy	Cross-sectional	General adolescent population	1,221 15-22 (18.3 (3.0) M&F	EPOCH	NR	NR	NR	NR
Di Pierro (2018)	USA	Cross-sectional	Latino youth	134 14-20 (16.14 (1.31)) M&F	Children's Hope Scale (CHS)	.70	NR	NR	NR
Diaconu-Gherasim (2017)	Romania	Trial	Students	139 15-18 (16.67 (0.93)) M&F	Life Orientation Test – Revised (LOT-R)	.68	NR	Construct validity	Acceptable fit of the single factor solution: χ2 (9, N = 138) = 16.10, p = 0.065; χ2/df = 1.17, NFI = 0.87, CFI = 0.84; RMSEA = 0.076
Diemer (2007)	USA	Cross-sectional	Urban students	220 15.57 (0.93) M&F	Career Commitment Measure (CCM)	.70	NR	NR	NR
Din (2018)	Malaysia	Cross-sectional	Students	176 13-19 M&F	The Reasons for Living Inventory for Adolescents (RFL-A)	.94	NR	Concurrent validity	Moderate negative correlation with suicidal ideation (r = -0.45)
Dixson (2017)	USA	Cross-sectional	Students	297 13-19 (16.09 (1.23) M&F	Children's Hope Scale (CHS)	.70 &.75 for the subscales	NR	Construct validity	EFA retained the original 2-factor structure with factor loadings ranging from 0.60 - 0.72
Dixson (2018)	USA	Cross-sectional	Students	672 11-18 (15.59 (1.57)) M&F	Children's Hope Scale (CHS)	.81	NR	NR	NR
Dixson (2018)	USA	Cross-sectional	African- American youth	117 14-19 (16.2 (1.53)) M&F	Children's Hope Scale (CHS)	.87 for overall scale, .80 & .75 for subscales	NR	Construct validity	2-factor solution with factor loadings >0.4 on EFA
Dixson (2019)	USA	Cross-sectional	Students	447 12-19 (15.80 (1.28)) M&F	Children's Hope Scale (CHS)	.88 for the overall scale, .76 & .81 for subscales	NR	Construct validity	EFA retained the original 2-factor structure with factor loadings ranging from 0.53 - 0.88
Dizen (2008)	USA	Cross-sectional	Students	93 17-24 (19.1 (1.3) M&F	Life Orientation Test – Revised (LOT-R)	.79	NR	NR	NR
Donald (2019)	Australia	Cohort	Students	2,809 13.7 (0.45) M&F	Children's Hope Scale (CHS)	.87 – .91 across time points	NR	NR	NR

Author (year)	Country	Design	Population	Sample	Measure				
Donovan (2015)	USA	Trial	Native youth	31 9th-12th graders M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Dooley (2015)	Ireland	Cross-sectional	Students	6,085 14.93 (1.62) M&F	Life Orientation Test – Revised (LOT-R)	.89	NR	NR	NR
Dorn (1993)	USA	Cross-sectional	Pregnant adolescents	40 14-19 (17.3 (1.3)) F	Life Orientation Test (LOT)	.80	NR	NR	NR
Dowling (2016)	Australia	Cross-sectional	Adolescents receiving web-based counselling services	1,033 16-25 (18.05 (2.44)) M&F	Children's Hope Scale (CHS)	.81	NR	NR	NR
Dragun (2021)	Croatia	Cross-sectional	Students	1,093 17.0 (1.5) M&F	1 item	NR	NR	NR	NR
Dubow (2001)	USA	Cohort	Students	95 6th-8th graders M&F	Wyman Future Expectations Scale	.82 & .85 across time points	NR	NR	NR
Dunn (2020)	Canada	Cross-sectional	Male athletes	144 16.41 (1.48) M	Life Orientation Test –Revised (LOT-R)	.71	NR	NR	NR
Duy (2019)	Turkey	Cross-sectional	Students	384 18.57 (3.51) M&F	Life Orientation Test (LOT)	.77	NR	NR	NR
Duy (2020)	Turkey	Validation	Students	307 14-19 (15.84 (1.21)) M&F	Positivity Scale	.81	NR	Cross-cultural adaptation	Single translation to Turkish and assessment of translation equivalence established by experts
								Measurement invariance	Measurement invariance across groups (high school vs college students) established
								Convergent validity	Significant correlations between positivity and optimism (0.43), positive affect (0.55), life satisfaction (0.60), self-esteem (0.62), pessimism (-0.36), negative affect (-0.47)
								Construct validity	CFA confirmed the unidimensional structure of the scale.
					Life Orientation Test (LOT)	.79	NR	NR	NR

Earhart (2009)	USA	Cross-sectional	Students	89 3rd-4th graders M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Eddington (2014)	USA	Cross-sectional	Students	416 18.95 (2.15) M&F	Life Orientation Test –Revised (LOT-R)	.72	NR	NR	NR
Edmond (2006)	USA	Cohort	Sexually abused adolescent girls in foster care	99 16.0 (0.95) F	12-item Future Orientation Scale developed from items adapted from the LOT-R and the Future Time Perspective Inventory	.70	NR	NR	NR
Edwards (2007)	USA	Validation	Mexican- American adolescents	135 11-15 (14.22 (1.06)) M & F	Children's Hope Scale (CHS)	.89	NR	Construct validity Measurement Invariance Convergent validity	Hierarchical two-factor model fit the data better: χ2/df =12.27, p < .001, RMSEA = .01 The model satisfied the requirement of strict measurement invariance, generating gender-equivalent factor correlations, factor loadings, and factor uniqueness, Δχ2 (8, N = 135) = 7.65, p > 0.10 Significant correlations with measures of positive affect (0.49), life satisfaction (0.44), social support (0.28 & 0.32), and optimism (0.41)
					Life Orientation Test – Revised (LOT-R)	.58	NR	NR	NR
Eggum (2011)	Uganda	Cross-sectional	General adolescent population	57 13.83 (2.83) M&F	Children's Hope Scale (CHS)	.70	NR	NR	NR
Ehman (2019)	USA	Cohort	Children with cancer and comparison peers	298 8-17 (12.44 (2.86)) M&F	Youth Life Orientation Test (YLOT)	.82	NR	NR	NR
Eicher (2014)	Switzerland	Cohort	Students	4,312 16-20 M&F	5 items	.82 – .85	NR	NR	NR
Eichner (2014)	USA	Cross-sectional	Students	510 19.6 (3.3) M&F	Life Orientation Test (LOT)	0.76	NR	NR	NR

					Snyder's Hope Scale	.76 & .71 for subscales			
El-Abbassy (2020)	Egypt	Trial	Students	80 13-15 (13.7 (0.67)) M&F	Life Orientation Test –Revised (LOT-R)	.52 – .58	NR	NR	NR
Erol (2013)	Turkey	Cross-sectional	Adolescents with visual impairment	130 13.63 (1.47) M&F	Beck Hopelessness Scale	.69	NR	NR	NR
Esteban-Gonzalo (2021)	Spain	Cohort	Students	1,590 10-20 M&F	Children's Hope Scale (CHS)	.76	NR	NR	NR
Evans (2019)	USA	Cross-sectional	Students	8,030 12.5 M&F	School Success Profile -Future Optimism Scale	NR	NR	NR	NR
Ey (2005)	USA	Development and validation	Students	204 3rd-6th graders M&F	Youth Life Orientation Test (YLOT)	83 for overall scale, .79 & .78 for Optimism & Pessimism subscales	.75 for overall scale, .65 & .65 for Optimism & Pessimism subscales	Construct validity Convergent and discriminant validity Predictive validity	2 factors accounting for 50% of the total variance Correlations with hope (0.47, 0.54, -0.34, p<0.0001), global competence (0.48, 0.36, -0.49, p<0.0001), social competence (0.47, 0.35, -0.46, p<0.0001). Optimism significantly related to the composite score on the Children's Attributional Style Questionnaire (CASQ), rho = .15, p < .05, and CASQ negative attributions scale, rho = 16, p < .05. Pessimism was related to CASQ negative attributions scale, rho = .20, p < .05, and the composite score on the CASQ, rho =).22, p < .0001. Children's optimism early in the school year predicted three months later fewer child-reported depressive symptoms and parent-reported externalizing problems. By contrast, children's pessimism at Time 1 predicted later anxiety symptoms and parents' ratings of their child as less academically and socially competent on the Child Behavior Checklist Competency scale

					Children's Hope Scale (CHS)	.84	NR	NR	NR
Falanga (2020)	Italy	Cross-sectional	Students	271 17.6 (1.54) M&F	Snyder's Hope Scale	NR	NR	NR	NR
Fang (2016)	China	Cross-sectional	Migrant students	301 14.0 (1.5) M&F	Children's Hope Scale (CHS)	.83	NR	NR	NR
Feldman (2018)	Israel	Cross-sectional	Students	1,719 9-11 (10.25 (0.7)) M&F	Children's Hope Scale (CHS)	.73	NR	NR	NR
Felix (2011)	USA	Cross-sectional	Students	463 7th&8th grade M&F	Children's Hope Scale (CHS)	.88	NR	NR	NR
Ferrari (2010)	Italy	Cross-sectional	Students	1,155 11-18 M&F	The Achievability of Future Goals Scale Snyder's Hope Scale	.68 .75	.61 .65	Construct validity Construct validity Cross-cultural adaptation	Single factor structure accounting for 41.43% of the variance Single factor structure accounting for 37.06% of the variance All scales translated to Italian
Ferrer (2017)	UK	Cross-Sectional	Undergraduate student smokers	725 18-21 (19.2 (1.2)) M&F	Life Orientation Test (LOT)	NR	NR	NR	NR
Fialkov (2021)	Kenya	Trial	Adolescent girls	311 13-14 F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Finch (2020)	Australia	Cross-sectional	Students	456 9-14 (11.54 (1.20)) M&F	Children's Hope Scale (CHS) Youth Life Orientation Test (YLOT)	.89 .85	NR	NR	NR
Finkelstein (2007)	USA	Cross-sectional	Students	1,167 12-20 (16.0 (1.6)) M&F	Life Orientation Test (LOT)	.70	NR	NR	NR
Fischer (1986)	USA	Cross-sectional	Students	583 9-13 M & F	Generalized Expectancy for Success Scale (GESS)	.79 and .65 for Optimism & Pessimism subscales	NR	NR	NR

Fite (2014)	USA	Cross-sectional	Latino youth	141 16.14 (1.30) M&F	Children's Hope Scale (CHS)	.90	NR	NR	NR
Foka (2021)	Greece	Trial	Refugee children	72 7-14 (10.76 (1.96)) M&F	Life Orientation Test (LOT)	.82	NR	NR	NR
Fong (2019)	China	Cross-sectional	Students	1,051 Primary 4,5&6 M & F	The Short Test Hope Scale (STHS)	.83	NR	NR	NR
Foster (2014)	USA	Cross-sectional	Adolescents and young adult survivors of pediatric cancer	56 11-20 (16.19 (2.48)) M&F	Life Orientation Test –Revised (LOT-R)	.75			NR
Foster (2016)	Australia	Trial	Adolescents from families with mental health problems	64 8-17 (11.69 (2.51)) M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Frederick (2015)	USA	Trial	At-risk adolescents	26 11-17 M&F	Adolescent Domain-Specific Hope Scale (ADSHS)	NR	NR	NR	NR
Froh (2008)	USA	Trial	Students	221 12.17 (0.67) M&F	1 item	NR	NR	NR	NR
Fry (2012)	USA	Cross-sectional	Adolescents enrolled in the national youth sports programs	395 9-16 (11.80 (1.54)) M&F	Children's Hope Scale (CHS)	.75	NR	NR	NR
Furlong (2013)	USA	Development and validation	Students	1,995 4th-6th graders M&F	Positive Experiences at School Scale (PEASS)	.88 for the overall scale, .66 for the Optimism Subscale	NR	Construct validity	EFA yielded a 4-factor structure (gratitude, zest, optimism, persistence) that accounted for 42.7% of the total variance. CFA confirmed the 4-factor structure with items loading in the intended scales and with adequate model fit: $\chi2=421.37$, df=164, p<0.05; CFI=0.927; SRMR=0.045; RMSEA=0.044
								Content validity	Item readability and comprehension was ascertained by a pilot sample of students; 5 raters conducted readability analysis from student responses and concluded that most students (70% or more) comprehended the items

								Measurement invariance	Scale showed sufficient configural, metric and scalar invariance across gender: RMSEA=0.04 for males, and females, RMSEA=0.053
								Concurrent validity	Correlations with measures of prosocial behavior (r = 0.64 – 0.65, p < 0.001) and school connectedness (r = 0.39 – 0.59, p < 0.001 for acceptance and caring relationships subscales; -0.27 – -0.34 for rejection subscale. High scores on the scale were positively related with school safety and negatively related with victimization
Gallegos-Guajardo (2015)	Mexico	Trial	Adolescent girls living in an orphanage	57 5-15 (10.95 (2.94)) F	Children's Hope Scale (CHS)	.79	NR	NR	NR
Gaspar (2009)	Portugal	Cross-sectional	Students	3,195 10-16 (11.81 (1.46)) M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Gaudreau (2015)	Canada	Cross-sectional	Athlete students	183 11-18 (14.88 (1.58)) M&F	Life Orientation Test – Revised (LOT-R)	.60 & .72 for subscales (reliability coefficient H)	NR	Construct validity	MLRχ2 (4) = 5.73, p = 0.22, CFI = 0.99, TLI = 0.96, RMSEA = 0.05
Geers (2010)	USA	Trial	Adolescents in health treatment programs	186 18.46 M&F	Life Orientation Test – Revised (LOT-R)	.84 & .79 across samples	NR	NR	NR
Geers (2013)	USA	Cross-sectional	Students	244 19.0 (1.32) M&F	Life Orientation Test – Revised (LOT-R)	.75 & .73 across samples	NR	NR	NR
Gerard (2015)	USA	Cohort	Students	675 8th-11th graders M&F	Child/Adolescent Measurement System - Hopefulness Subscale	.90	NR	NR	NR
Gillham (2011)	USA	Cohort	Students	149 13-15 M&F	Values in Action Inventory of Strengths for Youth (VIA-Youth)	> .84	NR	Construct validity	PCA revealed five factors with eigenvalues > 1.0
Gilman (2006)	USA	Cross-sectional	Students	341 14.58 (2.13) M&F	Children's Hope Scale (CHS)	.73 & .77 for subscales	NR	NR	NR

Ginevra (2017)	Italy	Development and validation	Students	1,845 14-19 M&F	Visions about Future Scale	.86, .84 & .78 for optimism, hope & pessimism subscales	NR	Content validity	Experts checked the content appropriateness and clarity of each item, and one item was revised
								Face validity	A pilot sample of adolescents were asked to read aloud the items and comment on clarity and whether they assessed the intended domains
								Construct validity	PAF & EFA suggested a 3-factor solution accounting for 45.01% of the total variance; confirmed by CFA: SB-X2 (149, n = 675) = 395.350; p < 0.001; CFI = 0.98; NNFI = 0.98; RMSEA = 0.05
								Discriminant validity	T-tests showed significant gender differences for 13 items, with boys showing higher means than girls (p<.05)
								Convergent validity	Positive relations between total score, hope and optimism subscales with hope and optimism; negative relation with pessimism subscale.
								Concurrent validity	Positive relations between optimism and hope factors with measures of career adaptability and life satisfaction (0,26-0.51); pessimism factor correlated negatively (-0.13 - -0.26)
								Measurement invariance	Configural, metric, and scalar invariance across genders established
					Snyder's Hope Scale	.74 for overall scale, 66 & .62 for subscales	NR	NR	NR
						.60 & .69	NR	NR	NR

					Life Orientation Test – Revised (LOT-R)				
Ginevra (2018)	Italy	Trial	Students	154 10.65 (1.24) M&F	My Hope Scale	.77	NR	NR	NR
					What will Happen to Me Scale	.81 & .88 across time points			
Ginevra (2018)	Italy	Development and validation	Students	1,513 11-15 M&F	Visions about Future Scale	.83 for hope, .74 for pessimism, and .80 for optimism	NR	Construct validity	A 3-factor oblique solution with 16 items accounted for 43.75% of total variance with good fit on CFA provided adequate support for the model with the three factors correlated (optimism, pessimism, and hope); and the hierarchical model with the three factors combined on a single dimension (positive vision about future)
								Convergent and concurrent validity	Generally, VAF factors and the total score correlated with scores on measures of optimism, pessimism, and hope, life satisfaction and career adaptability in the hypothesized direction and association strength
								Measurement invariance	Measurement invariance across gender established
								Content validity	Items were reviewed by two experts who had knowledge in the scale development and career and vocational designing field.
								Face validity	A pilot study ensured that the items were appropriate and comprehension adequate
					Snyder's Hope Scale	.72 for overall scale, .60 & .70 for subscales	NR	NR	NR
						.63 & .60	NR	NR	NR

					Life Orientation Test – Revised (LOT-R)				
Gizir (2009)	Turkey	Cross-sectional	Students	872 13-16 (14.3 (0.6)) M&F	Beck Hopelessness Scale	NR	NR	NR	NR
Goebert (2019)	USA	Cohort	Native Hawaiians	7,317 9th-12th graders M&F	3 items	NR	NR	NR	NR
Gonzalez-Carrasco (2019)	Spain	Cohort	Students	940 9-16 M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Goodman (1995)	USA	Cohort	Adolescent girls engaging in risky sexual behaviors	124 16.2 (1.3) F	Life Orientation Test (LOT)	.61	NR	NR	NR
Goodman (1997)	USA	Cross-sectional	Adolescents in clinical settings	156 15-18 (16.3 (1.1)) M&F	Life Orientation Test (LOT)	.56 – .76 across time points	0.84	NR	NR
Gregory (2021)	Australia	Cohort	Students	3,906 9-12 (11.9 (0.28)) M&F	3 item Optimism Scale adapted from the Resiliency Inventory	.74	NR	NR	NR
Griggs (2019)	USA	Cross-sectional	Students	495 18-21 (18.37 (0.54) M&F	Snyder's Hope Scale	.87	NR	NR	NR
Grunbaum (2000)	USA	Cross-sectional	Students	475 High Schoolers M&F	Life Orientation Test (LOT)	.57	NR	NR	NR
Gungor (2019)	Turkey	Cross-sectional	Students	378 10-15 (12.34 (1.37)) M&F	Children's Hope Scale (CHS)	.77	NR	NR	NR
Guse (2011)	South Africa	Cross-sectional	Students	1,169 15.1 (1.08) M&F	Children's Hope Scale (CHS)	.73	NR	NR	NR
Guse (2016)	South Africa	Validation	Students	1,046 13-16 (15.90 (0.91)) M&F	Children's Hope Scale (CHS)	.73 for the overall scale, .59 & .66 for the subscales	NR	Construct validity Convergent validity	A higher order model (with overall hope factor and agency and pathways subfactors) indicated a good fit: SRMR=0.02, TLI=0.98, CFI=0.99, RMSEA=0.04 Positive correlation with coping self-efficacy (0.58, p<0.01), positive affect (0.48,

									p<0.01) and psychological wellbeing (0.59, p<0.01)
								Discriminant validity	Negative correlation with negative affect (-0.23, p<0.01)
Gustafsson (2010)	Sweden	Cross-sectional	Athletes	178 15-20 (17.1 (1.2) M&F	State Hope Scale	.81 overall, .77 & .66 for subscales	NR	Cross-cultural adaptation	Scale forward-translated to Swedish and back-translated to English
Gustafsson (2012)	Sweden	Cross-sectional	Competitive adolescent athletes	217 16-19 (17.21 (0.25)) M&F	Life Orientation Test – Revised (LOT-R)	.67	NR	NR	NR
Habib (2020)	Lebanon	Cross-sectional	Refugee children	4,090 8-18 (13.0 (2.7)) M&F	10 items	NR	NR	NR	NR
Haggstrom (2019)	Sweden	Cross-sectional	Students	948 11-16 M & F	Generalized Expectancy for Success Scale (GESS)	.70 & .82 across samples	NR	NR	NR
Hamilton (2015)	USA	Cohort	Early adolescents	259 12.86 (0.60) M&F	Future Orientation Scale	.74	NR	NR	NR
Hasan (2002)	Kuwait	Cross-sectional	Students	322 18.9 (1.5) M&F	The Arabic Scale of Optimism/ Pessimism	.93 for the optimism subscale and .94 for pessimism subscale	NR	Concurrent validity Convergent validity	Correlations with the Life Orientation Test (r = 0.78 with optimism subscale and r = -0.69 with pessimism subscale) Negative correlation of optimism subscale with depression, anxiety and obsession-compulsion, and vice versa for pessimism subscale
He (2018)	China	Cross-sectional	Students	941 15.89 (0.81) M&F	Snyder's Hope Scale Life Orientation Test – Revised (LOT-R)	.64 & .61 for subscales .63	NR NR	NR NR	NR NR
Heaven (2008)	Australia	Cohort	Students	884 12.3 (0.49) M&F	Children's Hope Scale (CHS)	.79 & .83 for boys and girls, respectively	NR	NR	NR
Heffelfinger (2008)	USA	Cross-sectional	Adolescents with Spinal bifida	43 12-21 (15.76 (2.42)) M&F	Snyder's Hope Scale	NR	NR	NR	NR

Heizomi (2015)	Iran	Cross-sectional	Students	403 15-19 M&F	Snyder's Hope Scale	.67	NR	NR	NR
Hendricks (2005)	USA	Validation	Rural early adolescents	1,036 7th&8th graders M&F	Miller Hope Scale	.93 for overall scale, .75 – .82 for subscales	NR	Construct validity	CFA indicated an adequate fit for a 3-factor model: x^2=1620, df=432, p=0.001, NFI=0.90, GFI=0.91
Hendricks-Ferguson (2006)	USA	Cross-sectional	Adolescents with cancer	78 13-20 (16.0) M&F	Hind's Hopefulness Scale for Adolescents	.92	NR	NR	NR
Hendricks (2016)	South Africa	Cross-sectional	Adolescents from low-income settings	191 14-18 M&F	The Expectations/ Aspirations Measure	.78 & .87 across grades	NR	NR	NR
Hernandez (2010)	Spain	Cross-sectional	Students	172 10.7 M&F	Children's Attributional Style Questionnaire	NR	NR	NR	NR
Hezomi (2018)	Iran	Cross-sectional	Female adolescent students	289 14-15 F	Snyder's Hope Scale	.53	NR	NR	NR
Hinds (1999)	USA	Trial	Adolescents with cancer	78 12-21 (16.0 (2.1) M&F	Hind's Hopefulness Scale for Adolescents	.89 – .92 across time points	NR	NR	NR
Hinic (2020)	Serbia	Cross-sectional	Students	1,263 16.85 (1.01) M&F	Optimism and Pessimism Scale	.81	NR	NR	NR
Hinton-Nelson (1996)	USA	Cross-sectional	Early adolescents	89 8th&9th graders M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Hjelle (1996)	USA	Cross-sectional	Students	207 19.5 (2.5) M&F	Life Orientation Test (LOT)	.78	NR	NR	NR
Ho (2010)	China	Cross-sectional	Students	1,807 12-18 (15.19 (1.72)) M&F	Cross-Cultural Personality Assessment Inventory (CPAI-A) - Optimism versus Pessimism (O-P) scale	76	NR	NR	NR
Hoekman (2005)	Australia	Cross-sectional	Intellectually gifted adolescents	402 7th graders M&F	Tedium Measure	NR	.84	NR	NR
Hughes (2010)	Canada	Cross-sectional	Homeless adolescents	60 16-24 (19.4 (2.43)) M&F	4 items	NR	NR	NR	NR
Hui (2010)	China	Cross-sectional	Students	760 3rd-6th graders	Children's Hope Scale (CHS)	.85	NR	NR	NR

				M&F					
Hussong (2021)	USA	Cohort	Students	105 11-16 M&F	Abbreviated Life Orientation Test – Revised (LOT-R)	.81	NR	NR	NR
Idan (2014)	Israel	Cross-sectional	Adolescents with learning disabilities	856 15-18 M&F	Children's Hope Scale (CHS)	.85	NR	NR	NR
Israelashvili (1997)	Israel	Cross-sectional	Students	471 11-18 (14.6 (1.4)) M & F	Children's Future Expectation Scale	.69 & .80 across samples	NR	NR	NR
Jackson (2005)	Canada	Cross-sectional	Students	938 13-21 (17.5) M&F	Life Orientation Test (LOT)	.83 – .90 across time points	NR	NR	NR
Jackson (2012)	USA	Cross-sectional	Students	192 3rd-6th graders M&F	The Peer Life Orientation Test (PLOT)	.86	NR	NR	NR
Jacobs (2014)	USA	Cross-sectional	Adolescents with depression	291 12-17 (14.57 (1.53)) M&F	Cognitive Triad Inventory for Children	NR	NR	NR	NR
					Beck Hopelessness Scale	NR	NR	NR	NR
Jelonkiewicz (2010)	Poland	Cross-sectional	Students	1,326 15-20 (17.0 (0.91)) M&F	You and Health Scale	NR	NR	NR	NR
Jiang (2018)	China	Cross-sectional	Students	1,026 13.76 (1.27) M&F	Snyder's Hope Scale	.87 for overall scale, .77 & .77 for subscales	NR	Construct validity	CFA showed that the two-factor model had an acceptable fit to the data: χ2 (19) =2.82, p < 0.001, CFI = 0.969, RMSEA = 0.059
Jiang (2020)	USA	Cohort	Students	1,201 11-19 (14.6 (2.06)) M&F	Children's Hope Scale (CHS)	.83	NR	NR	NR
Jobe-Shields (2011)	USA	Cohort	Students	170 9-11 M&F	The Peer Life Orientation Test (PLOT)	.81	NR	NR	NR
Johnson (2020)	USA	Cross-sectional	Justice-involved youth	79,960 10-18 (14.13 (2.22)) M&F	4 items	NR	NR	NR	NR
Jombikova (2007)	Slovakia	Cross-sectional	Students	321 15-20 M&F	The Optimism and Pessimism scale	NR	NR	NR	NR
Joseph (2020)	India	Cross-sectional	Adolescents with cancer	100 13-19 M&F	Herth Hope Index	NR	NR	NR	NR

Jovanovic (2012)	Serbia	Cross-sectional	Students	408 16.6 (0.88) M&F	Children's Hope Scale (CHS)	.75	NR	NR	NR
Jovanovic (2013)	Serbia	Validation	Students	936 14-18 M&F	Children's Hope Scale (CHS)	.80 for overall scale, .65 & .72 for subscales	NR	Construct validity	2-factor model provided superior fit to data: x^2=83.07, df=8, RMSEA=0.1, CFI=0.95, GFI=0.97, NFI=0.95
								Measurement invariance	Configural, scalar, metric, and strict invariance across gender supported: ΔCFI < 0.01 and insignificant
								Convergent validity	Significant positive correlations with measures of optimism, self-efficacy, resilience, self-esteem, life satisfaction, and positive affect. Significant negative correlations with measures of negative affect, loneliness, and distress
								Incremental validity	Hope predicted an additional variance in subjective well-being measures above self-efficacy and optimism (ΔR2=.02 for affective well-being; ΔR2=.04 for life satisfaction) as well as above optimism and self-esteem (ΔR2=.11 for affective well-being; ΔR2=.04 for life satisfaction). However, hope did not uniquely predict general distress (ΔR2=.00 for analyses involving both self-efficacy and optimism, and optimism and self-esteem)
					Life Orientation Test – Revised (LOT-R)	.73	NR	NR	NR
					Personal Optimism Scale	.80	NR	NR	NR
Jovanovic (2013)	Serbia	Validation	Students	744 15-24 (18.68 (2.51)) M&F	Life Orientation Test (LOT-R)	.75 for overall scale, 67 & .70 for subscales	NR	Cross-cultural adaptation	Scale translated into Serbian by the study's authors, and backtranslated

								Construct validity	into English by a bilingual English teacher, then sent to one of the scale's authors who confirmed its accuracy
									The two-factor model was superior and showed acceptable to good fit indices $(X2(8) = 18.71, p < 0.05; x^2/df = 2.34; RMSEA = 0.044, CFI = 0.99; GFI = 0.99; NFI = 0.98)$
								Convergent validity	Correlations with measures of hope (0.48, 0.45, -0.34), self-efficacy (0.48, 0.49, -0.35), positive affect (0.45, 0.44, -0.32), life satisfaction (0.48, 0.47, -0.33), negative affect (-0.41, -0.33, 0.35), loneliness (-0.28, -0.24, 0.23), general distress (-0.46, -0.35, 0.44)
					Children's Hope Scale (CHS)	.75	NR	NR	NR
Kaiser (2015)	Pakistan	Cross-sectional	Students	400 14-18 (16.0 (1.6)) M&F	Life Orientation Test – Revised (LOT-R)	.85	NR	NR	NR
Karababa (2020)	Turkey	Cross-sectional	Early adolescents	639 11-14 (12.8 (0.65)) M&F	Children's Hope Scale (CHS)	.74	NR	NR	NR
Karcher (2008)	USA	Trial	Latino youth	516 10-18 M&F	Children's Hope Scale (CHS)	.84	NR	NR	NR
Kasler (2008)	Israel	Cross-sectional	Victims of rocket attacks	311 9-11 M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Kassis (2018)	Austria Germany Slovenia Spain	Cross-sectional	Students	5,149 14.5 M&F	Youth Inventory Instrument - Optimistic Future View Subscale	.68	NR	NR	NR
Kassinove (1995)	Russia USA	Cross-sectional	Students	961 10-18 M& F	The General Measure of Optimism-Pessimism	.81	NR	Construct validity	PCA yielded 9 factors accounting for 53.9% of the variance both in Russian and American sample
Kaye-Tzadok (2019)	Israel	Cross-sectional	Students	2,977 8-12, 66.3% aged 10-12 M&F	Children's Hope Scale (CHS)	.85	NR	NR	NR

Kemer (2012)	Turkey	Cross-sectional	Students	737 14-19 M&F	Snyder's Hope Scale	NR	NR	Construct validity	The fit indices of the two-factor model were found to be satisfying [$x^2(19) = 41.20$, $x^2/df= 2.17$, RMSEA = 0.04, SRMR = 0.04, GFI = 0.97, AGFI = 0.95, IFI = 0.98, NFI = 0.97, CFI = 0.98]
Kennes (2021)	Netherlands	Validation	Students	281 11-18 (14.32 (1.97)) M&F	Life Orientation Test – Revised (LOT-R)	.55 & .66 for Optimism & Pessimism subscales, respectively (Omega)	0.74 & 0.67 for optimism & pessimism subscales, respectively	Construct validity Criterion validity Convergent and divergent validity	CFA confirmed a 2-factor structure: $x^2/df = 20.391$ (8), CFI = 0.97, TLI = 0.94, RMSEA = 0.06, SRMR = 0.03 Higher scores of optimism at baseline were prospectively associated with higher scores of emotional wellbeing (EWB), psychological wellbeing (PWB), and social wellbeing (SWB) at follow-up. In addition, higher scores of optimism at baseline were prospectively associated with lower scores of psychological problems at follow-up. Optimism correlated positively with positive outcomes (positive emotions, 0.61; EWB, 0.53; PWB, 0.57; SWB, 0.44) and negatively with negative outcomes (negative emotions -0.58, psychological problems -0.51). Pessimism correlated negatively with positive outcomes (positive emotions -0.43, EWB, -0.35; PWB, -0.37; SWB, -0.13) and positively with negative outcomes (negative emotions 0.47, psychological problems 0.50)
Kenny (2010)	USA	Cross-sectional	Students	201 9th-12th graders M&F	Work Hope Scale	.88	.92	NR	NR
Kern (2015)	Australia	Cross-sectional	Male students	516 13-18 M&F	Children's Hope Scale (CHS)	.84	NR	NR	NR
Kern (2016)	Australia USA	Development and validation	Diverse samples of adolescents	4,480 10-18 M&F	EPOCH Measure of Adolescent Wellbeing	.65 – .85 across samples for	.24 – .70 across samples for	Face validity	Items at face value represented the 5 factors of the scale

					the Optimism subscale	the Optimism sub-scale		Construct validity	A 5-factor model demonstrated good model fit on CFA: RMSEA = 0.053, SRMR = 0.038, χ2 (160) = 545
								Convergent and discriminant validity	Correlation between the connectedness sub-scale and measures of wellbeing, psychologic symptoms, life conditions, health and behavior, sociodemographic indicators and academic performance
Kern (2019)	Australia USA China	Validation	Students	6,217 9-19 (14.4 (2.9)) M&F	EPOCH Measure of Adolescent Wellbeing	.94 for the overall scale across samples, .77 – .90 for subscales (omega)	NR	Construct validity	A 5-factor structure fit the data well: RMSEA = 0.048, SRMR = 0.053, CFI = 0.960, TLI = 0.952
								Measurement invariance	The 5-factor model showed strict invariance across gender (RMSEA = 0.041, CFI = 0.95, χ2 = 2079.7, df = 370) and age (RMSEA = 0.044, CFI = 0.94, χ2 = 2352.1, df = 370), as well as configural (RMSEA = 0.042, CFI = 0.96, χ2 = 2983.5, df = 480) and weak invariance across countries (RMSEA = 0.045, CFI = 0.95, χ2 = 3476.0, df = 510)
								Cross-cultural adaptation	Scale translated to Chinese then backtranslated to English by independent translators following translation procedures. Experts reviewed the two versions and agreed that the translated version captured the language and meaning of the original measure
Kernsten (2016)	USA	Trial	Students	163 19.74 M & F	Inventory of Health-related Optimistic Beliefs	.70 – .73 across samples	NR	NR	NR
Kerret (2016)	Israel	Cross-sectional	Students	254 13-17 (13.7 (1.05)) M&F	Children's Hope Scale (CHS)	.86 for overall scale, .60 & .86 for subscales	NR	NR	NR

Keyfitz (2013)	Canada	Development and validation	Ethnically diverse adolescents	172 9-14 (11.44) M&F	Positive Schema Questionnaire (PSQ)	.93 for overall scale, .83 for Optimism subscale	NR	Construct validity	PCA revealed 5 factors accounting for 71.1% of the total variance
Khallad (2010)	USA	Cross-sectional	Students	167 19.59 (1.74) M&F	Life Orientation Test – Revised (LOT-R)	.66	NR	NR	NR
Khamis (2013)	Palestine	Cross-sectional	Adolescents exposed to armed conflict	1,697 6-16 (12.1 (2.54)) M&F	Children's Hope Scale (CHS)	.76 & .79 for the subscales	NR	Content validity	Scale translated to Arabic and content validity assessed by comparing items in the original and translated versions. Items in the translated version closely reflected those in the original version
Khodarahimi (2014)	Iran	Cross-sectional	Adolescents exposed to family violence	300 11-19 (14.69 (1.38)) M&F	Children's Hope Scale (CHS)	.88 for overall scale, .84 & .86 for subscales	NR	NR	NR
Khullar (2011)	USA	Cohort	Students	1,298 12-19 (15.24 (1.66)) M&F	Life Orientation Test (LOT)	NR	NR	NR	NR
Kim (2016)	South Korea	Cross-sectional	Students	386 10.81 (0.43) M&F	Youth Life Orientation Test (YLOT)	.77	NR	NR	NR
Kim (2019)	South Korea	Cross-sectional	Adolescents with chronic illnesses	220 10-18 M&F	Herth Hope Index	.90	NR	NR	NR
Kim (2021)	USA	Trial	Students of color	116 11-14 (12.2 (0.94)) M&F	Youth Engagement and Action for Health! (YEAH!) Questionnaire - Optimism for Change subscale	NR	NR	NR	NR
King (1997)	USA	Cross-sectional	Students	405 16-51 (18.58 (2.48)) M&F	Life Orientation Test (LOT)	.81	NR	NR	NR
Kintanar (2013)	Philippines	Cross-sectional	Students	140 18.38 (1.40) M&F	Snyder's Hope Scale	.74 for overall scale, .65 & .66 for subscales	NR	NR	NR
Kirschman (2010)	USA	Cohort	Inner- city youth	406 11-14 (12.13 (0.98)) M&F	Children's Hope Scale (CHS)	.82 – .87 for overall scale across time points, .64 – .81 across time points for subscales	NR	NR	NR

Kogan (2005)	USA	Cohort	High school dropouts	318 16-18 M&F	10 items	.87	NR	NR	NR
Kogan (2013)	USA	Cohort	African-American male adolescents	315 11-18.5 M	State Hope Scale	.81	NR	NR	NR
Koizumi (1992)	Japan	Development and validation	Students	398 3rd-9th graders M&F	Optimism Scale for Students (OSS)	NR	.72	NR	NR
Koizumi (1995)	Japan	Cross-sectional	Students	584 5th-9th graders M&F	Generalized Expectancy for Success Scale (GESS)	.90 & .82 for Optimism & Pessimism subscales, respectively	NR	Construct validity Concurrent validity	PCA yielded 2 factors accounting for 37.4% of the total variance Negative correlation of optimism subscale with hopelessness and positive correlation with pessimism subscale
Koizumi (1999)	Japan	Cross-sectional	Students	507 9-13; 65.5% aged 11-13 M&F	Optimism Scale for Students (OSS)	NR	NR	NR	NR
Kolovelonis (2018)	Greece	Cross-sectional	Students	374 11.39 (0.59) M&F	Life Orientation Test – Revised (LOT-R)	.51 & .68 for Optimism & Pessimism subscales, respectively	NR	Cross-cultural adaptation Construct validity	Scale translated into Greek by the authors and backtranslated by two other bilingual persons, compared to the original and minor modifications applied, then given to a sample of students to comment on item comprehension. Minor modifications further made following this feedback 2-factor structure showed adequate model fit: $\chi2$ (8) = 9.07, p = 0.336, NNFI = 0.967, CFI = 0.982, RMSEA = 0.032
Konowalczyk (2019)	Germany Luxembourg Spain	Cross-sectional	Students	2,351 12-18 M&F	Adolescent Time Attitude Scale (ATAS)	.82, .86 & .87 across samples for future positive subscale	NR	NR	NR
Korkmaz (2019)	Turkey	Cross-sectional	Students	353 14-18 (16.05 (1.17)) M&F	Snyder's Hope Scale	.79	NR	Construct validity	2-factor structure: $\chi2$ = 46.82, sd = 19, $\chi2$/sd = 2.46, RMSEA = 0.06, CFI = 0.91, GFI = 0.97

Kotzer (2007)	Israel	Cross-sectional	Adolescents with and without learning difficulties	374 7th-9th graders M&F	Children's Hope Scale (CHS)	.76 & .78 across time points	NR	NR	NR
Kovacs (2014)	Hungary	Cross-sectional	Students	881 14-18 (16.6 (1.3)) M&F	Life Orientation Test (LOT)	.70	NR	NR	NR
Kretschmer (2010)	UK	Cross-sectional	General adolescent population	102 11-19 M&F	Aspiration Index	.52 – .72	NR	NR	NR
Krok (2015)	Poland	Cross-sectional	Late adolescents	211 16-20 (18.22 (1.08)) M&F	Life Orientation Test – Revised (LOT-R)	.76	NR	NR	NR
Kubzansky (2004)	USA	Cross-sectional	Students	320 18-22 (18.9) M&F	Life Orientation Test (LOT)	.70 & .80 for Optimism & Pessimism subscales, respectively	NR	Construct validity

Predictive validity | 2-factor structure fit the data well: x2=42.64, df=20, P=0.002, NNFI=0.88, CFI=0.93

Expected correlations with anger (-0.08, p<0.01), anxiety (-0.28, p<0.01), depression (-0.29, p<0.01), smoking (1.57*, p<0.05), alcohol consumption (0.02), physical activity (2.0) |
Kunzendorf (2007)	USA	Cross-sectional	Students	171 18-51 (19.1 (3.8)) M&F	Beck Hopelessness Scale	NR	NR	NR	NR
Kuperminc (2011)	USA	Trial	Adolescent girls in youth programs	175 9-15 (11.13 (1.48)) F	14 items	.80 & .56	NR	NR	NR
Kurdek (1987)	USA	Validation	Students	170 11.06 (2.64) M&F	Children's Beliefs about Parental Divorce Scale – Hope of Reunification Subscale	.80 for overall scale, .78 for hope subscale	.65 for overall scale, .51 for Hope subscale	Construct validity	6-factor structure accounting for 50% of the total variance
Kwok (2016)	China	Trial	Adolescents with depression	68 10.5 (1.53) M&F	Children's Hope Scale (CHS)	.78	NR	NR	NR
Kwok (2019)	China	Trial	Adolescents with anxiety	106 13.63 (0.85) M&F	Children's Hope Scale (CHS)	.81	NR	NR	NR
Kwok (2019)	China	Cohort	Neglected children	910 10-18 (13.86 (0.94)) M&F	Children's Hope Scale (CHS)	.78	NR	NR	NR

Lackaye (2006)	Israel	Cross-sectional	Students with learning disabilities and comparison peers	571 7th graders M&F	Children's Hope Scale (CHS)	.89	NR	NR	NR
Lagace-Seguin (2010)	Canada	Cross-sectional	Students	98 10-14 (12.51 (0.95)) M&F	Youth Life Orientation Test (YLOT) Children's Hope Scale (CHS)	.85 for each subscale .89 for overall scale, .85, & .78 for subscales	NR	NR	NR
Lai (2004)	China	Cross-sectional	Students	340 15.3 (0.7) M&F	Life Orientation Test – Revised (LOT-R)	.54	NR	NR	NR
Lai (2009)	China	Cross-sectional	Students	345 13.2 (0.97) M&F	Life Orientation Test – Revised (LOT-R)	.75	NR	NR	NR
Lamm (1976)	Germany	Cross-sectional	Students	100 14-16 M&F	20 items adapted from the Aspiration Ladder	NR	NR	NR	NR
Lang (2020)	Germany	Cross-sectional	Students	1,099 8-17 (11.74 (2.08)) M&F	Self-Efficacy, Optimism, and Pessimism -Short Version (SWOP-K9)	.72 at both time points	NR	NR	NR
Lara (2013)	Spain	Cross-sectional	Students	106 12-17 (14.1 (0.98) M&F	The Positivity Scale	.80	NR	NR	NR
Lau (2020)	USA	Trial	Adolescents and young adults with cancer	92 12-25, 73% aged 12-17 M&F	Snyder's Hope Scale	NR	NR	NR	NR
Lee (2015)	USA	Cross-sectional	African American youth	171 18-24 (19.78 (1.29)) M&F	Life Orientation Test – Revised (LOT-R)	.82	NR	NR	NR
Lee (2016)	USA	Validation	Students	797 10-18 M&F	Persistent Academic Possible Selves Scale for Adolescents (PAPSS) State Hope Scale	.97	NR	Construct validity Convergent validity Discriminant Validity	8-factor structure fit the data very well: CFI = 0.96, TLI = 0.96, RMSEA = 0.06 Correlations with hope, future time perspectives-connectedness, academic self-concept, expected grade change and hopeful grade change Non-significant correlations with last grade

							.77	NR	NR	NR
Lee (2018)	South Korea	Cross-sectional	Students	46 6th graders M&F	Children's Attributional Style Questionnaire	.65 – .79 across subscales	NR	NR	NR
Lehrer (2017)	USA	Cross-sectional	Adolescent girls	510 11-18 F	Children's Hope Scale (CHS	.90	NR	NR	NR
Lei (2019)	China	Validation	Students	1,934 8-17 (12.96 (2.69)) M&F	Children's Hope Scale (CHS)	.74	NR	Construct validity	Single factor structure showed acceptable model fit to data: RMSEA = 0.07, SRMR=0.04, CFI = 0.96, TLI = 0.93
								Measurement invariance	Invariance across socioeconomic status: configural invariance yielded a good fit, metric invariance - partial loading invariance with one non-invariant loading yielded a good fit, partial scalar invariance observed, full strict invariance observed
								Convergent validity	Positive correlations with self-esteem scores across 3 samples: full sample: r = 0.507, p < 0.001; lower SES sample: r = 0.468, p < 0.001; higher SES sample: r = 0.585, p < 0.001
Lemes (2018)	Brazil	Cross-sectional	Students	1,460 12-19 M&F	1 item	NR	NR	NR	NR
Lenz (2021)	USA	Cross-sectional	Students	449 12.22 (0.93) M&F	Herth Hope Index	.82 & .86 across samples	NR	NR	NR
Levi (2014)	Israel	Cross-sectional	Students	289 15.7 (0.51) M&F	Children's Hope Scale (CHS)	.80	NR	NR	NR
Lev-Wiesel (2009)	Israel	Trial	Adolescent males at risk of drug abuse	34 14-17 (15.36 (1.56)) M	Life Orientation Test – Revised (LOT-R)	.91	NR	NR	NR
Lewis (1996)	USA	Cross-sectional	Children with Sickle Cell Disease	39 7-16 (11.0 (2.9)) M&F	Children's Hope Scale (CHS)	.75	NR	NR	NR
Li (2018)	China	Cohort	Students	381 17-23 (19.69 (1.62)) M&F	Snyder's Hope Scale	.83 – .88 across time points	NR	NR	NR

Li (2018)	USA	Development and validation	Students	1,902 14-18 M&F	Climate Change Hope Scale (CCHS)	.68 – .80 across subscales	NR	Content validity Construct validity Convergent validity	Experts and a pilot sample of students assessed the scale's relevance and appropriateness 11-item 3-factor structure fit the data well: RMSEA=0.06, TLI=0.97, CFI=0.98 Significant positive correlations with trust (0.54, p<0.05, 0.43-0.45 for subscales) and self-efficacy (0.63, p<0.05, 0.41-0.65 for subscales)
Limonero (2014)	Spain	Cross-sectional	Students	362 18-22 (19.7 (3.4)) M&F	Life Orientation Test – Revised (LOT-R)	.78	NR	NR	NR
Lin (2014)	China	Trial	Adolescents orphaned by AIDS	124 9-17 (13.69 (1.22)) M&F	1 item	.88	NR	NR	NR
Lin (2016)	China	Cross-sectional	Children affected by HIV/AIDS and comparison peers	1,625 6-18 (12.85 (2.21)) M&F	Children's Future Expectation Scale Hopefulness about Future Scale	.84 .78	NR	NR	NR
Ling (2015)	China	Cross-sectional	Students	1,654 14-17 (15.85 (1.02)) M & F	Life Orientation Test – Revised (LOT-R) Children's Hope Scale (CHS)	.77 .84	NR	NR	NR
Ling (2016)	China	Cross-sectional	Community-based adolescents	1688 13-18 (15.85 (1.02)) M&F	Life Orientation Test – Revised (LOT-R)	.77	NR	NR	NR
Ling (2021)	China	Cross-sectional	Students	2045 11-16 (12.94 91.12)) M&F	Children's Hope Scale (CHS)	.65 – .82	.710 &.709	Construct validity Convergent validity Measurement invariance	CFI, TLI and SRMR were within acceptable ranges Correlated with life satisfaction, self-esteem, social support and Optimism scales Measurement invariance across gender was established using MGCFA.

							NR	Cross-cultural adaptation	Scale forward-translated to Chinese and backward-translated to English
					Life Orientation Test - Revised (LOT-R)	.64		NR	NR
Liu (2020)	USA	Cross-sectional	Students	1,060 8-12 M&F	Children's Hope Scale (CHS)	.86	NR	NR	NR
Lloyd (2009)	Canada	Cross-sectional	Adolescents with Type 1 diabetes mellitus	50 15.0 (1.1) M&F	Children's Hope Scale (CHS)	.88	NR	NR	NR
Loughry (2006)	Palestine	Trial	Children exposed to political conflict	400 10.79 (2.21) M&F	The Doucette and Bickman's Hopefulness Scale – Youth Version	NR	NR	Cross-cultural adaptation	Scale was translated and back-translated by the Arabic-speaking members of the research team
Ludwig (2009)	USA	Cross-sectional	Students exposed to community violence	175 14-19 M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Luengo (2017)	Colombia	Cohort	Students	151 12.68 (1.06) M&F	Positivity Scale	.84 & .91 across time points	NR	NR	NR
Maatta (2007)	Sweden	Cohort	Students	734 14-15 M&F	Revised Orientation-Attribution Questionnaire	.75-.84 across time points	NR	NR	NR
Macaskill (2014)	UK	Cross-sectional	Students	214 19.11 (3.33(M&F	Trait Hope Scale	.82 for overall scale, .77 & .70 for subscales	NR	NR	NR
					Life Orientation Test (LOT)	.81	NR	NR	NR
MacKenzie (2017)	UK	Cohort	Students	3,343 19.0 (18-22) M&F	The Managing Emotions and Resiliency Scale (MEARS)	NR	NR	NR	NR
Madden (2011)	Australia	Trial	Students	38 10.7 M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Magnano (2015)	Italy	Cross-sectional	Students	803 16-22 (17.73 (0.87)) M&F	Life Orientation Test – Revised (LOT-R)	.86	NR	NR	NR
Magnuson (2017)	Canada	Cross-sectional	Street-involved youth	92 14-18 (16.5 (1.6)) M & F	1 item	NR	NR	NR	NR

Mahat (2001)	Nepal	Cross-sectional	Adolescent' girls	101 15-17 (15.7 (0.58)) F	Hopefulness Scale for Adolescents	.70	NR	NR	NR
Mahat (2020)	USA	Cross-sectional	Urban minority adolescents	65 15-17 M&F	Hopefulness Scale for Adolescents	.73	NR	NR	NR
Mahler (2018)	USA	Cohort	Adolescent male first-time offenders	1,165 13-17 (15.29) M	2 items	NR	NR	NR	NR
Mahon (2002)	USA	Cross-sectional	Early adolescents	127 12-14 (13.1 (0.79)) M&F	The Future Time Perspective Inventory (FTP) Life Orientation Test (LOT)	.84 .78	NR	NR	NR
Mahon (2004)	USA	Cross-sectional	Early adolescents	134 12-14 (12.9 (0.58)) M&F	Hopefulness Scale for Adolescents	.71	NR	NR	NR
Maikranz (2007)	USA	Cross-sectional	Children with renal and liver transplantations	70 7-18 (13.32 (3.22)) M&F	Children's Hope Scale (CHS)	.81	NR	NR	NR
Malinchoc (1996)	USA	Cross-sectional	General adolescent population	1,315 13-17 (15.0 (1.4)) M&F	Optimism-Pessimism Scale of the Minnesota Multiphasic Personality Inventory (MMPA-PSM)	.85	NR	NR	NR
Malti (2018)	USA	Validation	Students	5,946 13.6 (1.92) M&F	Holistic Student Assessment	.84 for the optimism subscale (Omega)	NR	Construct validity Measurement invariance Convergent validity	EFA yielded a 7-factor solution, CFA confirmed the solution with good model fit: $\chi2$ (254) = 805.102, p < 0.001; CFI = 0.962; TLI = 0.955, RMSEA = 0.047 Scale showed measurement invariance across age groups (late childhood, early adolescence, and middle-late adolescence) Negative correlation between optimism and internalizing problems (-0.33, p<0.001), externalizing problems (-0.05),

									and prosocial behavior (-0.08, p<0.05)
Mannix (2009)	USA	Cross-sectional	Adolescents with cancer	23 13-21 (16.1 (2.5)) M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Manuel (2020)	South Africa	Validation	Students	899 13-16 (13.12 (2.01) M&F	Children's Hope Scale (CHS)	NR	NR	Construct validity Content validity	A modified single factor structure fit the data well: x^2=37.123, df=7, p<0.000, CFI=0.986, RMSEA=0.069, SRMR=0.022 Scale forward- and back-translated to Afrikaans, then piloted to assess language accessibility, subsequently revised and finalised using this pilot test
Marin (2019)	Iran	Cross-sectional	Students	1,104 High Schoolers M&F	Children's Attributional Style Questionnaire	NR	NR	NR	NR
Marques (2009)	Portugal	Validation	Students	367 10-15 (11.78 (1.22)) M&F	Children's Hope Scale (CHS)	.81	.51	Content validity Construct validity Convergent validity	Scale forward translated to Portuguese and back translated to English, then content validity analysis was performed on the translated version EFA yielded a 2-factor solution explaining 70.98% of the total variance. The two factors positively intercorrelated (r=0.64, p < 0.001) Significant correlations with satisfaction with life (0.63,p<0.01), global self-worth (0.60, p<0.01) and mental health (0.45, p<0.01)
Marques (2011)	Portugal	Trial	Students	62 10-12 (10.96 (0.31)) M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Marques (2013)	Portugal	Cohort	Students	227 15-19 (16.28 (1.31)) M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR

Marques (2014)	Portugal	Validation	Students	1,012 16-18 M&F	Children's Hope Scale (CHS)	.86 for overall scale, .79 & .81 for subscales	.80 for overall scale, .72 & .74 for subscales	Cross-cultural adaptation	Scale forward-translated to Portuguese and back-translated to English, followed by a discussion to achieve consensus on lexical and cultural equivalence
								Content validity	Two of the authors performed content validity analysis by verifying the wording to ensure they express desired content
								Construct validity	2-factor model showed a good fit: x2 = 217.26, df = 19, p < 0.001, CFI = 0.95, TLI = 0.93, GFI = 0.95, RMSEA = 0.07, RMR = 0.018
								Criterion validity	The variance shared between Agency and Pathways factors (ρ Agency × Pathway = .711) was less than the average variance in the items explained by each Agency and Pathways factors, ave ρ vc(η) = .720
									Correlations with mental health (0.39-0.45, p<0.001), life satisfaction (0.50-0.57, p<0.001), psychological distress (-0.36 - -0.43, p<0.001), Psychological wellbeing (0.36-0.40, p<0.001), academic achievement (0.25-0.30, p<0.001)
Marques (2016)	Portugal	Cohort	Students	367 10-15 (11.78 (1.22)) M&F	Children's Hope Scale (CHS)	.81 & .80 across time points	.52	NR	NR
Marsay (2018)	South Africa	Trial	Juvenile sex offenders	12 14-18 (15.6) M	The Comprehensive Child and Adolescent Hope Scale	NR	NR	NR	NR
Martin-Krumm (2015)	France	Validation	Students	1,605 10-23 (15.67 (2.62)) M&F	State Hope Scale	.86 for overall scale, .72 & .78 for subscales in Sample 1; .71	NR	Content validity	Scale forward-translated to French and back-translated to English. A translator verified the clarity of the French items, then a pilot study was

Author (year)	Country	Design	Population	N Age	Measure			Validity	
						for overall scale, .71 & .77 for subscales in Sample 2			conducted to further ascertain clarity. Modifications made to the scale following these procedures
								Construct validity	A second order model with two factors was deemed the most acceptable: x2=21.12, df=8, SRMR=0.02, CFI=0.99, TLI=0.98, RMSEA=0.06, AIC=47.12
								Measurement invariance	Results demonstrate strict invariance of the scale across age groups (ΔTLI = 0.005-0.10) and equivalent factorial structure and factor loadings across gender
								Predictive validity	Hope was significantly and positively associated with mental Health (β = 0.26, p < 0.001).
Martins (2018)	Portugal	Cross-sectional	Children with cancer	211 8-19 (13.29 (3.56)) M&F	Children's Hope Scale (CHS)	.76 & .79 across samples	NR	NR	NR
Mascaro (2005)	USA	Cohort	Students	191 18.8 (0.93) M&F	Snyder's Hope Scale / Herth Hope Index	.82 .92	.60 .74	NR	NR
Mason (2017)	USA	Cross-sectional	African-American women	84 18-25 (19.75 (1.86)) F	Life Orientation Test – Revised (LOT-R)	.78	NR	NR	NR
Mavioglu (2015)	Netherlands	Cross-sectional	Adolescent twins and non-twin siblings	6,186 13-16 M&F	Life Orientation Test – Revised (LOT-R)	.65	NR	Construct validity	EFA yielded 2 correlated (r=-0.30) factors explaining 55.54% of the total variance
Mazur (1992)	USA	Cross-sectional	Children experiencing parental divorce	38 8-12 (10.08) M&F	5 items	.54	1.0 (interrater)	NR	NR
McCabe (2000)	USA	Cross-sectional	African-American adolescents	72 12.4 (0.5) M&F	The Future Orientation Interview based on the Future Orientation Questionnaire	NR	.81 (.46-1.0) interrater	NR	NR
McCoy (2015)	USA	Cohort	Urban adolescents	489 15-19 (17.2) M&F	"Things I can Do If I Try" Questionnaire	NR	NR	NR	NR

McDavid (2015)	USA	Cohort	Youth in Physical activity programs	321 7-14 (10.33 (1.76)) M&F	Children's Hope Scale (CHS)	.77 – .82 across time points	NR	Measurement invariance	Temporal (over time) invariance demonstrated
McDermott (2016)	USA	Validation	Reengaged students	248 15-21 (17.54 (1.48) M&F	Snyder's Hope Scale	.86	NR	Construct validity	EFA & CFA indicated a 2-factor structure with a good fit: (χ2 = 112.14, df = 13, p < 0.001)
								Criterion validity	Significant positive correlation with cognitive (r= 0.88, p<0.001) and emotional engagement (r = 0.68, p<0.001)
McGregor (2012)	Australia	Development and validation	Students	426 9-12 (10.71 (0.96)) M&F	Children's Optimistic and Pessimistic Expectations of Relationships Scale (COPER)	.90 & .84 for subscales	NR	Content validity	The initial pool of 40 items was scrutinized for readability and suitability by 14 children from the target population and adult experts
								Construct validity	2-factor solution explaining 53.97% of the total variance, confirmed by CFA with acceptable model fit: x2 (96) = 200.95, p < 0.01, x2/df = 2.09, GFI = 0.90, CFI = 0.93, and RMSEA = 0.08.
								Convergent validity	Positive associations of optimism subscale with friendship, social acceptance, perception of peers, meta-perception (grade), meta-perception (outside of school), and parental warmth, and negative associations with parental rejection, angry expectations of rejection, anxious expectations of rejection, and outcome expectations of rejection
								Discriminant validity	Optimistic expectations of relationships had the lowest correlation with social desirability.
McGregor (2012)	Australia	Cross-sectional	Students	837 9-13 (10.82 (0.96)) M&F	Children's Optimistic and Pessimistic Expectations of	.87 & .85 for subscale	NR	NR	NR

					Relationships Scale (COPER)				
McNeal (2006)	USA	Cross-sectional	Youth in residential care setting	155 10-17 (14.5 (1.5)) M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
McWhirther (2008)	Chile	Development and validation	Students	389 12-19 M&F	Future Expectations Scale for Adolescents (FESA)	.87 for overall scale, .71-.88 for subscales	NR	Content validity	A native research assistant reviewed the items for meaning and clarity. Then a school psychologist reviewed and approved the items for meaning, clarity, language, and comprehension
								Construct validity	5-factor solution accounting for 59.9% of the total variance, with between-factor intercorrelaions ranging from 0.19-0.36
								Convergent validity	Expected positive correlations between the scale, including subscales and measures of hope, academic self-efficacy, connectedness to self, religion, family, and school, parental monitoring, educational aspirations, educational expectorations, and GPA (except marriage and family factor (-0.05) and children's future factor (-0.07)). Negative correlation with alcohol use, cigarette use (except work and education factor, 0.01), age (except children's future factor, 0.036)
Meehan (2007)	South Africa	Cross-sectional	Students	161 16.9 (0.69) M&F	Positive and Negative Suicidal Ideation Scale (PANSI)	.81	NR	NR	NR
Mello (2013)	USA	Cross-sectional	General adolescent population	1,049 12-20 (16.07 (1.25) M&F	Adolescent Time Inventory (ATI) Children's Hope Scale (CHS)	.88 .82 & .81 across samples	NR	NR	NR
Mello (2018)	USA	Cross-sectional	Runaway adolescents and comparison peers	744 15.65 (1.54) M&F	Life Orientation Test (LOT)	.82	NR	NR	NR

					Children's Hope Scale (CHS)	.83			
					Adolescent Time Inventory (ATI)	.85 & .90			
Merkas (2011)	Croatia	Cross-sectional	Students	298 10-15 (12.7 (1.18)) M&F	Children's Hope Scale CHS)	.80	NR	Construct validity	A 1-factor solution that accounted for 51% of the total variance on CFA was preferred
Merolla (2018)	USA	Cohort	Students	393 10-15 (12.5 (0.9)) M&F	3-item Children's Hope Scale (CHS)	.81, .84 & .88 across time points	NR	NR	NR
Meyer (2000)	USA	Cross-sectional	Students	127 17-51 (19.19 (3.44)) M&F	Life Orientation Test (LOT-R)	.85	NR	NR	NR
Michael (2005)	USA	Cross-sectional	Bereaved students	158 18-37 (19.19 (2.28)) M&F	Trait Hope Scale	.80	NR	NR	NR
Michael (2008)	Israel	Cross-sectional	Hard of hearing and typical hearing students	54 11-15 (12.59 (1.37)) M&F	Snyder's Hope Scale	.78 for overall scale, .74 & .64 for subscales	NR	Construct validity	Factor analysis yielded 2 factors with one item cross-loading, subsequently deleted
Michel (2010)	UK	Cross-sectional	Survivors of childhood cancer	41 12-15 (13.7 (1.1)) M&F	Youth Life Orientation Test (YLOT)	.72 for optimism subscale, .79 for pessimism subscale	NR	NR	NR
Midei (2014)	USA	Cross-sectional	Students	239 15.7 M&F	Life Orientation Test (LOT-R)	.60	NR	NR	NR
Mihalec-Adkins (2020)	USA	Cross-sectional	Adolescents in foster care	215 11-17 (13.91 (1.82)) M&F	3 items from the Expectations about Employment, Education, and Life Span section from the Adolescent Health Survey	.73	NR	NR	NR
Milam (2005)	USA	Cross-sectional	Students	513 13.5 (0.52 M&F	Life Orientation Test (LOT-R)	.65 & .68 for optimism and pessimism subscales, respectively	NR	NR	NR
Milioni (2016)	Italy	Cohort	Students	373 16-18 (16.91 (0.99) M&F	Life Orientation Test (LOT)	NR	NR	NR	NR

Millstein (2016)	USA	Trial	Youth in advocacy training program	144 9-22 (15.3 (2.73)) M&F	2 items	NR	NR	NR	NR
Miranda (2020)	Philippines	Cross-sectional	Students	300 18-25 (19.11 (1.01)) M&F	Life Orientation Test – Revised (LOT-R)	.74	NR	NR	NR
Mishra (2017)	India	Cross-sectional	Students	966 15-24 (19.15 (2.26)) M&F	Life Orientation Test (LOT-R)	.78	NR	NR	NR
Mitchell (2015)	USA	Cross-sectional	Students	711 19.44 (2.94) M&F	Snyder's Hope Scale	.76 – .85	NR	NR	NR
Mizuta (2018)	Japan	Cross-sectional	Students	2,630 12-15 M&F	Scale of Experiential Time Perspective	.63 for hopefulness subscale	NR	Criterion validity	Negative correlation with Birleson Depression Scale (-0.66, p<0.001)
Monzani (2014)	Italy	Validation	Students	698 15-19 (17.25 (1.10)) M&F	Life Orientation Test – Revised (LOT-R)	.76 (Omega)	NR	Construct validity Concurrent validity	2 Orthogonal Factor model showed the best fit: RMSEA=0.02, TLI=0.99, SRMR=0.02 Positive correlation with self-esteem (0.51), environmental mastery (0.51), self-acceptance (0.56), life satisfaction (0.39), positive affect (0.32), and psychological well-being dimensions of autonomy (0.39), purpose in life (0.32), personal growth (0.37), and positive relations (0.37). Negative correlation with negative affect (-0.39), depressive symptoms (-0.43), engagement in violent actions (-0.17) and physical and verbal aggression (-0.19); all ps<0.001.
Moore (2017)	Australia	Cross-sectional	Students	105 10-14 (12.1 (1.22) M&F	The Resiliency Scale for Children and Adolescents – Optimism Subscale	.69 & .78 across samples	0.68	NR	NR
Morawiak (2018)	Poland	Cross-sectional	Students	347 15-17 (16.55 (0.98)) M&F	Life Orientation Test (LOT) Future Time Perspective Scale (FTP)	.64 .75	NR	NR	NR

Author (Year)	Country	Design	Population	Sample	Scale	Reliability	Col8	Col9	Notes
Morgan (2011)	USA	Cross-sectional	Urban adolescents	159 12-16 (13.41 (0.8)) M&F	Children's Hope Scale Life Orientation Test (LOT)	86 .53	NR	NR	NR
Morley (2013)	Nepal	Cross-sectional	Child soldiers	142 11-18 (15.8 (1.6)) M&F	Children's Hope Scale CHS)	NR	NR	Cross-cultural adaptation	Scale adapted through a five-step, transcultural translation process. This included discussion of each item and scale by a focus group of Nepali children
Morton (2014)	Australia	Cross-sectional	Students	84 17-18 M&F	Life Orientation Test (LOT)	.82	NR	NR	NR
Mosher (2006)	USA	Cross-sectional	Black students	133 17-26 (19.19 (1.52)) M&F	Life Orientation Test (LOT)	.69	NR	NR	NR
Mowder (2010)	USA	Cross-sectional	Juvenile offenders	215 12-18 (16.08 (1.09)) M&F	Resiliency Scale for Children and Adolescents – Optimism Subscale	.91	NR	NR	NR
Mu (2021)	China	Cross-sectional	Students	3,602 12-17 M&F	Children's Hope Scale (CHS)	.87	NR	NR	NR
Mueller (2009)	USA	Cohort	Adolescents with and without intellectual disabilities	536 7th-12th graders M&F	4 items	.57 – .70 across time points for both groups	NR	NR	NR
Munoz (2019)	USA	Cross-sectional	General adolescent population	1,134 15.6 (1.6) M&F	Children's Hope Scale CHS	.92	NR	NR	NR
Munro-Kramer (2016)	USA	Cross-sectional	Arab-American adolescents	57 15-23 (17.88 (2.21) M&F	Trait Hope Scale	.77 for overall scale, .70 & .64 for subscales	NR	NR	NR
Murberg (2012)	Norway	Cohort	Students	198 16-18 M&F	Life Orientation Test – Revised (LOT-R)	.82	NR	NR	NR
Murphy (2016)	Australia	Cross-sectional	Students	75 10-12 (10.84 (0.66)) M&F	The Resiliency Scale for Children and Adolescents - Optimism Subscale	.84	NR	NR	NR
Mutumba (2016)	Uganda	Cross-sectional	Adolescents living with HIV	464 12-19 (15.58 (2.4)) M&F	7-item scale from the Add Health	.75	NR	NR	NR
Myors (2001)	Australia	Cross-sectional	Pregnant adolescents	71 15-19 (17.0 (1.27)	Revised Jalowiec Coping Scale	NR	NR	NR	NR

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Nabi (2019)	USA	Cross-sectional	Students	282 18-26 (19.3 (1.35)) M&F	2 items	NR	NR	NR	NR
Nakanishi (2019)	Japan	Cross-sectional	Early adolescents	2,550 12.1 M&F	1 item	NR	NR	NR	NR
Navarro (2015)	Spain	Cross-sectional	Students	1,058 10-12 (11.08 (0.8)) M&F	4-item Optimism Subscale from the Mental Health Measure from the US longitudinal survey of youth	.73	NR	Construct validity	CFA confirmed one factor explaining 47.19% of the total variance
Nes (2005)	USA	Cross-sectional	Students	54 18-29 (19.0) M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Neto (2000)	Cape Verde Portugal	Cross-sectional	Students	487 17.5 (1.2) M&F	The Optimism Scale	.60 & .83 across countries	NR	NR	NR
Neverlien (1991)	Norway	Cross-sectional	General adolescent population	163 10-12 M&F	Life Orientation Test (LOT)	.61 – .68	NR	Construct validity	Significant item intercorrelations (p<0.01)
Ng (2017)	China	Cross-sectional	Low-income youth	830 11-18 (14.25 (1.94)) M&F	Children's Hope Scale CHS)	.83 & .80 for subscales	NR	NR	NR
Nie (2019)	China	Cohort	Students	1,108 14-18 (15.89 (0.68)) M&F	Children's Hope Scale CHS)	.82 – .90 across time points	NR	NR	NR
Niu (2018)	China	Cross-sectional	Students	1,626 12-18 (14.31 (1.52)) M&F	Adolescents' Optimism Scale	.90 for overall scale, .81 – .87 for subscales	NR	NR	NR
Nordmarker (2016)	Sweden	Cross-sectional	Students	360 15-23 (16.94 (1.05)) M&F	Life Orientation Test (LOT)	.65	NR	NR	NR
O'Connor (2009)	Scotland	Cross-sectional	Students	2,008 15-16 M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Oberle (2011)	Canada	Cross-sectional	Students	1,402 11.5 (1.03) M&F	Resiliency Inventory-Optimism Subscale	.79	NR	NR	NR
Oberle (2018)	Canada	Cohort	Students	4,101 10-13 (12.01 (0.47)) M&F	Resiliency Inventory-Optimism Subscale	.75	NR	NR	NR

Oginska-Bulik (2015)	Poland	Cross-cultural	Adolescents in Children's homes	60 11-17 (14.8 (2.0)) M&F	Resilience Measurement Scale	.82 for overall scale, .76 – .87 for subscales	.78	NR	NR
Ojala (2012)	Sweden	Cross-sectional	Students	293 12.0 (0.28) M&F	3 items	.80	NR	NR	NR
Ojala (2013)	Sweden	Cross-sectional	Students	321 17.2 (0.49) M&F	3 items	.81	NR	NR	NR
Ojmyr-Joelsson (2006)	Sweden	Cross-sectional	Children with imperforate anus and comparison peers	87 8-13 (10.5) M&F	Items	NR	NR	NR	NR
Okado (2016)	USA	Cohort	Children and adolescents with cancer	223 8-17 (12.56 (2.82)) M&F	Youth Life Orientation Test (YLOT)	.76 & .73 for Optimism & Pessimism subscales	NR	NR	NR
Olasupo (2017)	Nigeria	Cross-sectional	Children in adversities	100 8-16 (14.3 (0.72)) M&F	Children's Hope Scale CHS)	.78	NR	NR	NR
Oliver (2014)	USA	Cross-Sectional	Adolescents & young adults with cystic fibrosis	72 14-25 (19.1 (3.3)) M&F	Life Orientation Test – Revised (LOT-R)	.79	NR	NR	NR
Orejudo (2012)	Spain	Cross-sectional	Students	386 12-19 (14.2 (1.49)) M&F	Youth Life Orientation Test (YLOT)	.82 for overall scale, .74 & .80 for subscales	NR	Construct validity	2 factors accounting for 47.49% of the total variance
Oreskovic (2013)	USA	Cross-sectional	Students	950 15.0 (1.6) M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Osman (1998)	USA	Development and validation	Clinical and non-clinical adolescents	2,087 14-19 M&F	Reasons for Living Inventory for Adolescents (RFL-A)	.96 for overall scale, .92 for future optimism factor	NR	Construct validity Convergent validity Discriminant validity	5 factors on EFA that accounted for 64.8% of the total variance; confirmed by CFA: NFI = 0.92, NNFI = 0.93, CFI = 0.97, RMSEA = 0.06 Significant negative correlations with suicidal behaviors (-0.26- -0.58), suicide probability (-0.26- -0.60), hopelessness (-0.31- -0.68), and depression (-0.20 - -0.46)

									Boys had significantly higher scores (M=4.94, SD = 1.03) compared with girls (M= 4.41, SD= 1.21), significant differences between suicide attempters and non-attempters (p<0.001)
Otis (2016)	USA	Cross-sectional	Students	647 6th-8th graders M & F	Children's Hope Scale (CHS)	.88	NR	NR	NR
Ottati (2017)	Brazil	Validation	Students	183 13-19 (15.77 (1.74)) M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	Construct validity	A 2-factor structure showed a more appropriate model fit: GFI=0.96, CFI=0.92, RMSEA=0.09, X2 (df)=20.69 (8)
Pacico (2011)	Brazil	Validation	Students	450 14-18 (16.8 (3.4)) M&F	Staats's Hope Index	.83 & .81 for subscales	NR	Construct validity Convergent validity	2 factors explaining 39% of the total variance Significant positive correlation with dispositional hope (0.46 & 0.21), optimism (0.47 & 0.21), and self-esteem (0.46 & 0.24)
					Snyder's Hope Scale	NR	NR	NR	NR
					Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Pacico (2013)	Brazil	Validation	Students	450 14-18 (16.8 (3.4)) M&F	Snyder's Hope Scale	.80	NR	Content validity Construct validity Convergent validity	Scale forward-translated to Portuguese then back-translated to English. Semantic equivalence was verified then the Portuguese version was administered to a pilot sample to verify comprehension Single factor explaining 41.8% of the total variance, supported by EFA: $\chi2$ RMSEA = .45, CFI = .97. Positive and moderate correlations with hope (0.43, p<0.01), optimism (0.49, p<0.01) and self-esteem (0.55, p<0.01)

					Staats's Hope Index	.81 – .83	NR	NR	NR
					Life Orientation Test – Revised (LOT-R)	.80	NR	NR	NR
Padilla-Walker (2011)	USA	Cohort	General adolescent population	489 9-14 (11.29 (1.01)) M&F	Children's Hope Scale (CHS)	.74	NR	NR	NR
Padilla-Walker (2020)	USA	Cohort	General adolescent population	500 13.32 M&F	Inventory of Strengths – Hope/Optimism Subscale	.85 – .87	NR	NR	NR
Pallini (2018)	Italy	Cross-sectional	Students	675 17.4 (0.84) M&F	Snyder's Hope Scale	.68 & .62 for subscales	NR	NR	NR
					Zombardo Time Perspective Inventory	.60-.70 across subscales	NR	Construct validity	5-factors explaining 37.5% of the total variance
Palmer (1998)	USA	Cross-sectional	Adolescents with mental retardation, learning disabilities and comparison peers	429 10-19 (14.26 (2.42)) M&F	Hopelessness Scale for Children	.69	NR	Construct validity	Factor analysis yielded a 2-factor structure
								Convergent validity	Significant correlations with measures of locus of control (0.42) and student attributions of academic success and failure (-0.37)
Park (2006)	USA	Development and validation	General adolescent population	736 10-17 M&F	Values in Action Inventory of Strengths for Youth (VIA-Youth)	.72 – .91, .83 for hope subscale	0.48 – 0.71, 0.55 for hope subscale	Convergent validity	Positive correlation with teacher and self-rated display of character strengths (0.23 & 0.44) for hope, life satisfaction (0.30), academic achievement (0.19), internalizing problems (-0.40)
								Construct validity	4-factor structure with Eigen values >1
Parker (2015)	Australia	Cross-sectional	Students	1,972 15.6 (0.43) M&F	Snyder's Hope Scale	.90	NR	NR	NR
Patton (2004)	Australia	Cross-sectional	Students	467 12-18 (14.96 (0.93)) M&F	Life Orientation Test – Revised (LOT-R)	.71	NR	NR	NR
Patton (2011)	Australia	Cohort	Students	5,634 13.1 (0.5) M&F	New 12-item Scale measuring Optimistic Thinking Style	.94	NR	Construct validity	A single factor structure explaining 59.25% of the total variance with factor loadings > 0.6

Pence (2007)	USA	Cross-sectional	Adolescents with Sickle Cell Disease	27 13-17 (14.81 (1.44)) M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Pennant (2020)	USA	Cross-sectional	Adolescents and young adults with cancer	10 15-29 (18.9 (3.0)) M&F	Snyder's Hope Scale	NR	NR	NR	NR
Phillips (2012)	USA	Cross-sectional	Students	278 14.78 (1.62) M&F	1 item	NR	NR	NR	NR
Phillips-Salimi (2007)	USA	Validation	Adolescents and young adults with cancer	201 10-26 (16.4 (2.9)) M&F	Herth Hope Index	84 & .78 across samples	0.57	Construct validity Convergent validity	A single factor fit the data well: NNFI = 0.97, CFI = 0.98, IFI = 0.98, RMSEA = 0.04 Significant correlations with measures of uncertainty (-0.40 - -.42, distress (-0.22), wellbeing (0.33), self-confidence (0.57), self-transcendence (0.58), and self-esteem (0.62)
Phipps (2007)	USA	Cross-Sectional	Children with cancer	199 7-18 (12.35 (3.4)) M&F	Youth Life Orientation Test (YLOT)	.83 for overall scale, .73 & .80 for subscales	NR	NR	NR
Piko (2020)	Hungary	Cross-sectional	Female adolescents	454 14-20 (16.3 (1.2)) F	Life Orientation Test – Revised (LOT-R)	.74	NR	NR	NR
Pillay (2018)	South Africa	Cross-sectional	Impoverished students	160 12-14 M&F	5 items	NR	NR	NR	NR
Pina-Watson (2015)	USA	Cross-sectional	Mexican- American adolescents	181 13-19 (16.66 (1.37) M&F	Children's Hope Scale (CHS)	.84	NR	NR	NR
Pinquart (2004)	Germany	Cohort	Students	593 18.2 (0.4) M&F	5 items	.78	NR	NR	NR
Pinquart (2014)	Germany	Cross-sectional	Adolescents with visual impairment	162 16.9 (2.6) M&F	Life Orientation Test – Revised (LOT-R)	.70	NR	NR	NR
Piqueras (2019)	Spain	Validation	Students	1,042 14.49 (1.69) M&F	Social and Emotional Health Survey - Secondary (SEHS-S)	.94 for overall scale, .91 for optimism subscale (omega)	NR	Cross-cultural adaptation Construct validity	Forward and backward translation followed by consensus Higher-order factor model showed adequate model fit: S-Bχ2 = 1065.86, df = 573, p <

Author (Year)	Country	Study design	Population	N, Age	Measure				
									0.01, CFI = 0.96, NNFI = 0.957, GFI = 0.923, SRMR = 0.050, RMSEA = 0.029
								Measurement invariance	Sufficient invariance across gender established
								Convergent and discriminant validity	Correlations with measures of psychosocial wellbeing (0.15-0.70, p<0.01), internalizing symptoms (-0.11 - -0.36, p<0.01), externalizing symptoms (-0.09 - -0.34, p<0.01), SDQ total score (-0.26 - -0.41, p<0.01), prosocial behavior (0.27-0.46, p<0.01), KIDSCREEN total score (0.22-0.63, p<0.01)
Polgar (2009)	USA	Cross-sectional	Youth in foster care	168 16.3(0.84) M&F	6 items each from Life Orientation Test and the Future Time Perspective Inventory	NR	NR	NR	NR
Pop-Jordanova (2018)	Macedonia	Cross-sectional	Children with dental problems	62 10.3 (2.02) M&F	Adolescent Coping Orientation for Problem Experiences (A-COPE)	NR	NR	NR	NR
Poteat (2020)	USA	Cohort	Sexual and gender minority youth	580 10-20 (15.59 (1.39)) M&F	State Hope Scale	.92 at both time points	NR	NR	NR
Pritchard (2007)	USA	Cohort	Students	242 18.02 (1.44)) M&F	Life Orientation Test (LOT)	.75	NR	NR	NR
Pryce (2019)	Canada	Trial	Immigrant youth	92 11-20 (15.0) M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Pulford (2009)	UK	Cross-sectional	Students	112 18-37 (19.33 (1.96)) M&F	Extended Life Orientation Test (ELOT)	.73 for optimism subscale, .87 for pessimism subscale	NR	NR	NR
Pulido-Martos (2014)	USA	Validation	Spanish adolescents	388 12-18 (14.6 (1.7)) M&F	Children's Hope Scale (CHS)	r.76	NR	Construct validity	2-factor structure: CFI=0.98; RMSEA = 0.07; SRMR = 0.03; CAIC = −29.52
								Cross-cultural adaptation	Scale translated to Spanish then back-translated to English,

								Convergent validity	followed by semantic equivalence analysis Significant (<0.01) positive correlations with satisfaction with life (0.63), subjective happiness (0.52), optimism (0.53) and positive affect (0.51) NR
					Life Orientation Test – Revised (LOT-R)	.70	NR	NR	
Purtell (2013)	USA	Cohort	Adolescents from low-income families	556 12-18 M&F	6-item scale adapted from a previous study	.59	NR	NR	NR
Puskar (1993)	USA	Cross-sectional	Rural adolescents	222 14-19 (15.69) M&F	Jalowiec Coping Scale	NR	NR	NR	NR
Puskar (1999)	USA	Cross-sectional	Rural adolescents	624 14-19 (15.85 (0.99)) M&F	Life Orientation Test – Revised (LOT-R)	.76	0.51	NR	NR
Puskar (2010)	USA	Cross-sectional	Rural adolescents	193 14-18 (15.57) M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Raats (2019)	South Africa	Cross-sectional	Students	1,004 12 years M&F	Children's Hope Scale (CHS)	.81	NR	Cross-cultural adaptation	Scale adapted through cognitive interviews and pilot testing
Rahman (2018)	Pakistan	Trial	Abused adolescents	8 11-12 M&F	Hope Scale by Al-mabuk, Enright and Cardis 1995	.72	NR	Cross-cultural adaptation	Scale forward translated to Urdu and backtranslated to English
Raikkonen (2008)	USA	Cross-sectional	General adolescent population	201 14-16 M&F	Life Orientation Test – Revised (LOT-R)	.60 overall, .51 & .63 for subscales	NR	Construct validity	CFA supported the 2-factor structure with excellent model fit: $\chi2(8) = 9.031$, p < 0.3397, CFI = 0.992, RMSEA = 0.025
Rasmussen (2011)	USA	Cross-sectional	Students	452 18-27 (19.87 (3.12)) M&F	Life Orientation Test – Revised (LOT-R)	.78	NR	NR	NR
Raviv (2021)	USA	Cross-sectional	Students	32,217 Prekindergarten – 12th grade, 64.6% in 4th grade onwards M&F	2 items	NR	NR	NR	NR

Rawana (2012)	Canada	Cross-sectional	Aboriginal youth	330 12-23 (12.0 (0.0)) M&F	2 items	NR	NR	NR	NR
Renaud (2019)	USA	Cohort	General adolescent population	218 18.22 (0.37) M&F	Life Orientation Test – Revised (LOT-R)	.86 & .83 across time points	NR	NR	NR
Rey (2018)	Spain	Cross-sectional	General adolescent population	1,294 14-17 (14.99 (0.99)) M&F	Children's Hope Scale (CHS) Life Orientation Test – Revised (LOT-R)	.81 .63	NR NR	NR NR	NR NR
Reynolds (2013)	USA	Cross-sectional	Adolescents with chronic illnesses	128 14.7 (1.8) M&F	Children's Attributional Style Questionnaire	.51 & .55	NR	NR	NR
Ritchie (2001)	USA	Cross-sectional	Adolescents with cancer	45 12-17 (14.2 (1.5)) M&F	Hopefulness Scale for Adolescents	.84	NR	NR	NR
Ritschel (2011)	USA	Trial	Depressed teens	6 14-17 M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Ritschel (2016)	USA	Trial	Depressed teens	28 15.43 (1.16) M&F	Children's Hope Scale (CHS)	.69 – .92 across time points	NR	NR	NR
Rivenbark (2020)	UK	Cohort	General adolescent population	2,232 12-18 M&F	10-item Optimism Scale from a previous study	NR	NR	NR	NR
Robb (2014)	USA	Trial	Children and young adults undergoing hematopoietic stem cell transplant	113 11-24 (17.3 (3.8)) M&F	Herth Hope Index	.65	NR	NR	NR
Roberts (1999)	USA	Cross-sectional	Adolescents from diverse backgrounds	5,423 12-14 (12.9) M&F	Life Orientation Test – Revised (LOT-R)	.68 for overall scale, .49 – .80 across samples	NR	NR	NR
Robitschek (1996)	USA	Trial	At-risk youth	98 14-18 (14.86 (1.05)) M&F	Snyder's Hope Scale	.90	NR	NR	NR
Rodriguez (2018)	Spain	Cross-sectional	Overweight/obese adolescents	110 10.0 (1.1) M&F	Life Orientation Test – Revised (LOT-R)	.72 – .98	NR	NR	NR
Roesch (2010)	USA	Cross-sectional	Minority adolescents	126 14-18 (15.5 (1.0)) M&F	Children's Hope Scale (CHS)	.73 for each subscale	NR	NR	NR

Romano (2020)	Canada	Cross-sectional	Students	74,501 12-19 (15.0 (1.5)) M&F	The Flourishing Scale	.87	NR	Measurement invariance	Full measurement invariance across age groups, gender, grade, and ethno-racial groups
Romero (2007)	USA	Cross-sectional	Students	650 14.0 M&F	Positive Global Expectancy Measure	.87	NR	NR	NR
Romero (2020)	USA	Cohort	Latinx immigrant adolescents	303 14.5 (0.88) M&F	Children's Hope Scale (CHS)	.84 – .94 across time points	NR	NR	NR
							NR	NR	NR
Rose (2018)	USA	Cross-sectional	General adolescent population	459 11-16 (13.32 (1.05)) M&F	Hope/Optimism Scale	.85	NR	NR	NR
Rosenberg (2018)	USA	Cross-sectional	Adolescents and young adults with cancer	37 14-24 (18.0) M&F	Snyder's Hope Scale	NR	NR	NR	NR
Rosenberg (2019)	USA	Trial	Adolescents and young adults with cancer	92 12-25; 73% aged 12-17 M&F	Snyder's Hope Scale	.74 – .84	NR	NR	NR
Rowley (2005)	USA	Cross-sectional	Minority adolescents	172 14-18 (15.46 (0.99) M&F	Children's Hope Scale (CHS)	.84 overall, .73 for each subscale	NR	NR	NR
Roy (2015)	South Africa	Cohort	Students	31 13.5 M&F	Optimism Scale from the International Personality Item Pool (IPIP)	.76	NR	NR	NR
Roysamb (2002)	Norway	Validation	General adolescent population	2,239 18.0 M&F	Life Orientation Test (LOT)	.72 & .67 for overall scale, .55 – .71 for subscales across sample	.74 & .67 for overall scale, .62 – .77 for subscales across samples	Cross-cultural adaptation Construct validity Convergent validity	A back-translation procedure was performed to ensure optimal retainment of wording and meaning content 2-factor model with good model fit: $\chi2 = 51.08$, df = 19, GFI = 0.99, AGFI = 0.99, RMR = 0.020, RMSEA = 0.027 Expected correlations with life satisfaction, positive affect, negative affect, self-efficacy, internal health locus of control, depressive tendencies, global negative self-evaluation, neuroticism, extraversion

Rubens (2020)	USA	Cross-sectional	Low-income Latinx youth	41 11.7 (0.85) M&F	Children's Hope Scale (CHS)	.90 & .86 for subscales	NR	NR	NR
Ruch (2014)	Germany	Validation	General adolescent population	2,110 10-17 M&F	Values in Action Inventory of Strengths for Youth (VIA-Youth)	.80 for hope subscale	0.71 for hope subscale	Cross-cultural adaptation Construct validity Convergent validity	Scale forward-translated to German and back-translated to English; minor revisions made following feedback from this process PCA yielded 5 factors with Eigen values >1 that explained 62.86% of the total variance Moderate correlation (0.49) between self- and parent-reported scores.
Rueger (2007)	USA	Cross-sectional	Students	238 5th&6th graders M&F	Life Orientation Test –Revised (LOT-R)	.70	NR	NR	NR
Ryzin (2011)	USA	Cohort	Students	423 11-19 (15.72 (1.83)) M&F	Snyder's Hope Scale	.82 & .83 across time points	NR	NR	NR
Sadeghi (2020)	Iran	Cross-sectional	Students	300 14-19 (16.36 (1.24)) M&F	Snyder's Hope Scale	.67	NR	NR	NR
Saeed (2019)	Iran	Cross-sectional	Female students	573 15.42 (1.82) F	EPOCH	NR	.85 for optimism subscale	Cross-cultural adaptation Content validity	Scale forward-translated to Persian and back-translated to English, revised, and pretested among a sample of adolescents 10 health education and psychology experts were asked to observe the translation process and check the questionnaires' quality in terms of grammar, wording, as well as items' ordering and positioning within the text and provide the necessary feedback to revise the items
Sahin (2018)	USA Turkey	Cross-sectional	Students	690 12-14 (13.29 (0.78)) M&F	Children's Hope Scale (CHS)	.80 for US sample, .78 for Turkish sample	NR	Construct validity	2-factor structure explaining 58% in the Turkish sample
Sahin-Baltaci (2017)	Turkey	Validation	Students attending academic and vocational schools	549 15-18 M&F	Adolescent Time Inventory - Time Attitude (ATI-TA)	.76-.87, .85 for future	NR	Construct validity	5-factor model showed acceptable fit: CFI = 0.98, TLI

						positive subscale		Measurement invariance	= 0.98, RMSEA = 0.02, SRMR = 0.05
								Convergent validity	Metric invariance supported across samples for future positive subscale

Scores on the positive subscales had positive relationships with self-esteem (0.30), well-being (0.55), and optimism (0.40, all ps<0.003) as hypothesized, and scores on negative subscales had negative relationships with those constructs (-0.11- -0.49) |
| | | | | | Life Orientation Test (LOT) | .66 | NR | NR | NR |
| Sahranc (2018) | Turkey | Cross-sectional | Students | 289
9-13 (10.39 (0.63))
M&F | Children's Hope Scale (CHS) | .64 | NR | Construct validity | $X2/df$ = 2.24, RMSEA = 0.07, CFI = 0.95, IFI = 0.95 |
| Sainio (2019) | Finland | Cohort | Students | 845
12.3 (4.38)
M&F | Achievement Emotions Questionnaire | .77 – .78 | NR | NR | NR |
| Salloum (2019) | USA | Cross-sectional | Bereaved youth | 85
7-18 (13.04 (3.08))
M&F | Children's Hope Scale (CHS) | .77 | NR | NR | NR |
| Sanchez-Ruiz (2021) | Lebanon | Validation | Students | 342
18-24 (19.76 (1.35))
M&F | The Trait Emotional Intelligence Questionnaire (TEIQue) – Optimism Subscale | .86 overall, .80 for optimism subscale | NR | Construct validity | 4-factor explaining 56.27% of the total variance extracted on PCA |
| Sanchez-Teruel (2020) | Spain | Cross-sectional | Moroccan male Immigrants | 326
18-22 (19.63 (1.13))
M | Life Orientation Test – Revised (LOT-R)

Herth Hope Index | .79 & .86

.92 & .87 | NR

NR | NR

NR | NR

NR |
| Santili (2017) | Italy
Sweden | Cross-sectional | General adolescent population | 1,259
12-16 (14.35 (2.34))
M&F | Visions about Future Scale | .88 for hope subscale and .78 for optimism subscale | NR | Measurement invariance | Both Italian and French versions reached configural, x^2(129) = 451.80, CFI = 0.976, NNFI = 0.970, RMSEA = 0.078; weak, x^2(147) = 490.45, CFI = 0.975, NNFI = 0.972, RMSEA = 0.075; and strong invariance, x^2(129) = 593.25, CFI = 0.969, NNFI = 0.969, RMSEA = 0.079 |

Santili (2019)	Italy	Trial	Students	108 13.1 (0.47) M&F	Visions about Future Scale	.88 for hope subscale and .85 for optimism subscale	NR	NR	NR
Santos (2015)	Portugal	Cross-sectional	Children with cancer	389 8-20 (18.25 (3.45)) M&F	Children's Hope Scale	.80	NR	NR	NR
Santos (2015)	Brazil	Cross-sectional	Adolescents and young adults with diabetes	113 11-23, 54.8% aged 11-18 M&F	Herth Hope Index	.83	NR	NR	NR
Saupe (2019)	Uganda	Validation	Adolescents affected by war	279 11-19 (14.59 (1.41)) M&F	Future Expectations Scale for Adolescents (FESA)	.89 overall scale; .85, .86 & .89 for subscales	NR	Cross-cultural adaptation Content validity Construct validity	Scale translated to Luo Acholi, back-translated to English with help from FGDs with local bilingual therapists. 3 FGDs with local clinical counsellors and teachers revealed important information for the adaptation of the scale to ensure validity in that context PCA revealed three main components with eigenvalues > 1, which explained 61.12% of variance
Savahl (2013)	South Africa	Cross-sectional	Adolescents from high and low violence areas	566 13-17 (15.04) M&F	Children's Hope Scale (CHS)	.71	NR	NR	NR
Savahl (2016)	South Africa	Validation	Students	1,022 13-16 M&F	Children's Hope Scale (CHS)	.82	NR	Construct validity Cross-cultural adaptation Measurement invariance	A single factor model with two error co-variances showed a good fit: x (2) = 35.692; df = 7; p = 0.00; CFI = 0.984; RMSEA = 0.063; SRMR = 0.023 Scale adapted through cognitive testing, translation into Afrikaans and pilot testing Adequate measurement invariance across socio-economic status
Savahl (2020)	South Africa	Validation	Students	7,076 9-12 (10.79 (1.28))	Children's Hope Scale (CHS)	NR	NR	Construct validity	A modified one-factor model with one error covariance showed excellent fit to data:

				M&F					x^2= 72.776, df = 8, p = 0.000, CFI = 0.994, RMSEA = 0.034
								Measurement invariance	Configural, metric, and scalar measurement invariance was attained across provincial regions
Savahl (2020)	South Africa	Validation	Students	1,022 11-12 (11.78 (1.68)) M&F	Children's Hope Scale (CHS)	.84	NR	Cross-cultural adaptation	Scale translated and adapted to Afrikaans using the backward-translation approach, followed by an expert panel review, and finally cognitive testing with the target population of children to resolve any discrepancies. The translated Afrikaans version of the CHS was then pilot tested
								Construct validity	A modified model with two error co-variances showed a good fit for the overall model using the pooled sample (X-2 = 35.692; df = 7; p =.00; CFI =.984; RMSEA =.063; SRMR =.023).
								Measurement invariance	The fit indexes for the multi-group models suggest a good fit structure for both constrained factor loadings and intercepts, suggesting the tenability of Multigroup scalar invariance across language groups (English vs Afrikaans): x^2 = 62.990, df = 19, p = 0.000, CFI = 0.975, RMSEA = 0.048, SRMR = 0.029
Schaefer (2018)	USA	Cross-sectional	Students with a history of physical violence and/or sexual abuse	161 18-24 (19.97 (1.86)) M&F	Life Orientation Test –Revised (LOT-R)	.76	NR	NR	NR
Schaffer (2017)	Israel	Trial	Children with pharmacoresponsive epilepsy	33 9-14 (10.88 (1.5)) M&F	Youth Life Orientation Test (YLOT)	NR	NR	NR	NR
Scheier (1985)	USA	Development and validation	Students	624 Undergraduates M&F	Life Orientation Test (LOT)	.76	.79	Construct validity	2-factor structure

							Convergent and discriminant validity	Correlations with internal-external control (0.34, p<0.01), self-esteem (0.48, p<0.01), hopelessness (-0.47, p<0.01), depression (-0.49, p<0.01), perceived stress (-0.55, p<0.01), social desirability (0.26, p<0.01), self-consciousness (-0.04 & -0.05), social anxiety (-0.33, p<0.01), alienation (-0.35 & -0.36, p<0.01), social relations (-0.26 - -0.31, p<0.01), alienation (-0.17- -0.40, p<0.01)
Schlosser (1992)	Netherlands	Cross-sectional	Children with Asthma	60 10-18 M&F	Respiratory Illness Opinion Survey – Optimism Subscale	NR	NR	NR	NR
Schmalt (2005)	Germany	Validation	Students	438 8-15 M & F	Achievement-Motive Grid	.77 – .81 for subscales	NR	Construct validity	A 3-factor structure explaining 54% of the variance
Schmeige (2011)	USA	Trial	Adolescents in detention	484 15.8 (1.1) M&F	4 items	.76	NR	NR	NR
Schmid (2011)	USA	Cohort	Students	1,311 14.18 (0.88) M&F	12 items	NR	NR	NR	NR
Schmid (2011)	USA	Cohort	Students	1,273 14.4 (1.4) M&F	13 items	NR	NR	NR	NR
Scholz (2021)	Australia	Cross-sectional	Students	1128 12-18 (14.36 (1.71)) M&F	Life Orientation Test – Revised (LOT-R)	.70	NR	NR	NR
Schonert-Reichl (2010)	Canada	Trial	Students	246 9-13 (11.43 (0.47)) M&F	Resiliency Inventory-Optimism Subscale	.74	NR	NR	NR
Schonert-Reichl (2015)	Canada	Trial	Students	99 9-11 (10.24 (0.53)) M&F	Resiliency Inventory-Optimism Subscale	.69 & .73 across time points	NR	NR	NR
Schwartz (2017)	USA	Cohort	Hispanic immigrants	302 14-17 (14.51 (0.88)) M&F	Children's Hope Scale (CHS)	.87 – .95	NR	Measurement invariance	Configural, metric, and partial scalar invariance across time was achieved
Scioli (1997)	USA	Cohort	Students	57 19.5 M&F	Life Orientation Test (LOT)	NR	NR	NR	NR
					Gottschalk's Hope Scale	NR	.61 (Interrater)	NR	NR

Scoloveno (2015)	USA	Cross-sectional	Students	311 15-17 (16.1 (1.66)) M&F	Hopefulness Scale for Adolescents	.93	NR	NR	NR
Scoloveno (2015)	USA	Cross-sectional	Students	311 15-17 (16.1 (1.66)) M&F	Hopefulness Scale for Adolescents – Anticipation of Personal Future Subscale	.71	NR	NR	NR
Scott (2003)	USA	Cross-sectional	African-American youth	120 14-18 (16.1 (1.12) M&F	The Cultural Questionnaire for Children (CQC)	.56 – .80	NR	NR	NR
Scott (2020)	USA	Trial	Adolescents with cancer	67 12-17 M & F	Snyder's Hope Scale	.74 – .84	NR	NR	NR
Sebokova (2018)	Slovakia	Cohort	Students	248 15.63 (1.15) M&F	EPOCH	.77 for optimism subscale at both time points	NR	NR	NR
Seff (2021)	USA	Cross-sectional	Students	176 15.31 M&F	Children's Hope Scale (CHS)	.81	NR	NR	NR
Seginer (2004)	Israel	Cohort	Students	146 11 graders M&F	The Hopes and Fear Questionnaire	NR	NR	NR	NR
Seidl (2021)	Germany	Cross-sectional	Adolescents and young adults with anxiety disorders	648 14-21 (17.55 (2.36)) M&F	Skala Optimismus-Pessimismus-2 (SOP2)	NR	NR	NR	NR
Senefeld (2011)	Tanzania Kenya Rwanda Haiti Zambia	Cross-sectional	Orphans and vulnerable children	889 13-18 M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Serek (2018)	Czech Republic	Cohort	Students	768 14-17 (15.97 (0.56)) M&F	Life Orientation Test – Revised (LOT-R)	.76	NR	NR	NR
Serrano (2019)	Spain	Cross-sectional	Students	626 13-18 (15.48 (1.00)) M&F	Life Orientation Test – Revised (LOT-R)	.63	NR	NR	NR
Serrano (2020)	Spain	Cross-sectional	Students	611 14-18 (15.49 (1.00)) M&F	Life Orientation Test – Revised (LOT-R)	.62	NR	NR	NR

Shadlow (2015)	USA	Validation	Native American adolescents	96 8-14 (10.52 (1.8)) M&F	Children's Hope Scale (CHS)	.67 for overall scale, .64 & .46 for subscales	NR	Construct validity	2-factor solution accounting for 38.2 and 16.2% of the total variance, respectively
					Hope Interview	NR	NR	NR	NR
Shapiro (2011)	USA	Trial	Students	30 18-24 (18.73 (1.29)) M&F	Snyder's Hope Scale	NR	NR	NR	NR
Sharabi (2012)	Israel	Cross-sectional	Students	287 10-11.6 M & F	Snyder's Hope Scale	.76	NR	NR	NR
Sharma (2017)	India	Trial	Aggressive adolescents	32 13-19 (5.81 (1.77)) M&F	Spiritual Wellness Inventory	NR	NR	NR	NR
Sharma (2019)	Nepal	Cross-sectional	Adolescents exposed to earthquake	409 12-19 (15.0 (1.22)) M&F	1 item	NR	NR	NR	NR
Sharp (2012)	USA	Cross-sectional	Students	361 14-18 M&F	Future Perspective Questionnaire	.81	NR	Construct validity	EFA showed a 4-factor structure with high intercorrelations among factors (0.34-0.73)
Sheard (2006)	UK	Trial	Swimmers	36 10-18 (13.9 (2.0)) M&F	Life Orientation Test (LOT)	NR	NR	NR	NR
Shek (1998)	China	Cohort	Early adolescents	378 12-16 M&F	Beck Hopelessness Scale	NR	NR	NR	NR
Shogren (2006)	USA	Cross-sectional	Adolescents with and without cognitive disabilities	360 7th-12th graders M&F	Children's Hope Scale (CHS) Life Orientation Test – Revised (LOT-R)	.89 & .87 .75 & .56 across sample	NR	Measurement invariance	Scales invariant across groups with and without disability with the measurement model demonstrating acceptable fit: (576, n = 360) = 993.25, p = <0.001, RMSEA = 0.056, NNFI = 0.95, CFI = 0.96
Shoshani (2014)	Israel	Trial	Students	1,038 11-14 (13.68 (0.64)) M&F	Life Orientation Test – Revised (LOT-R)	.53 – .59 for optimism subscale, .63 – .69 for pessimism subscale	NR	NR	NR
Shoshani (2020)	Israel	Trial	Adolescents exposed to war	2,228 11-15 (13.06 (0.87)) M&F	Peace Attitudes Scale	.82 & .81 across time points	NR	Construct validity	EFA yielded one factor with an eigenvalue greater than 1 (eigenvalue = 3.19) that accounted for 53.01% of the variance

Study	Country	Design	Population	N / Age (M (SD)) / Sex	Measure	Reliability (α)	Test-retest	Validity type	Validity details
Shubert (2019)	USA	Cross-sectional	Students	2,467 9-19 (13.4 (2.7)) M&F	New 3-item Optimism Scale	.81	NR	Content validity Convergent validity	Cognitive interviews were used to ensure the items were understood as intended, items were adapted following feedback from these interviews Positively correlated with aspects of positive functioning, including self-reported academic grades, prosocial behavior, and purpose in life
Sim (2011)	Singapore	Cross-sectional	Early and middle adolescents	236 12.5&15.5 M&F	Children's Hope Scale (CHS)	.92 & .90 across samples	NR	NR	NR
Sink (2014)	USA	Validation	Students	948 15.82 (1.27) M&F	Life Perspectives Inventory – Optimist Orientation Subscale	.64 – .83, .83 for Optimist Orientation Subscale	.65 – .90, .71 for Optimist Orientation Subscale	Construct validity	4-factor solution with Eigen values >2; $\chi 2 = 594.94$, df = 345, p < 0.001; CFI = 0.92; RMSEA = 0.045
Sleijpen (2016)	Netherlands	Cross-sectional	Adolescent refugees	111 12-17 (14.5 (1.8)) M&F	Life Orientation Test (LOT)	.67	NR	NR	NR
Smorti (2012)	Italy	Cross-sectional	Adolescents with cancer and comparison peers	80 11-20 M&F	Expectations for Future Scale	.77 & .81 across samples	NR	NR	NR
Solomon (2005)	Israel	Cross-sectional	Adolescents exposed to political violence and comparison peers	740 11-15 M&F	Children's Future Orientation Scale	.84 for overall scale, .60 – .93 for subscales	NR	Cross-cultural validation	Scale forward-translated to Hebrew and back-translated to English
Stanculescu (2016)	Romania	Cross-sectional	Early adolescents	289 14.3 (0.8) M&F	Life Orientation Test – Revised (LOT-R)	.78	NR	NR	NR
Stark (2017)	DRC	Cross-sectional	Displaced girls	869 10-14 (12.03 (1.5)) F	Children's Hope Scale (CHS)	.74	NR	NR	NR
Steele (2008)	USA	Cross-sectional	Students	109 11.35 (1.7) M&F	Children's Hope Scale (CHS)	.86	NR	NR	NR
Stephanou (2011)	Greece	Cross-sectional	Students	322 10-12 (11.15 (0.74)) M&F	Children's Hope Scale (CHS)	.89 & .86 for subscales	NR	Cross-cultural adaptation	Scale forward-translated to Greek and back-translated to English
Stevenson (2016)	USA	Cross-sectional	Students	1,486 11-15 M&F	Adolescent Climate Change Hope Scale	.80	NR	Construct validity Content validity	A Single factor with all factors >0.42 Cognitive interviews with five students were used to gather general feedback and

										suggestions for improvement in item wording and clarity
Stevenson (2018)	USA	Cross-sectional	Students	950 High Schoolers M&F	Adolescent Climate Change Hope Scale	NR	NR	NR	NR	
Stoddard (2011)	USA	Cross-sectional	General adolescent population	164 12.13 (0.54) M&F	EQ-I:YV -General Mood Scale	.65	NR	NR	NR	
Stoddard (2011)	USA	Cross-sectional	Latino youth	40 12-17 (15.65) M&F	4 items	.29	NR	NR	NR	
Stoddard (2015)	USA	Cross-sectional	Students	196 12.39 (0.52) M&F	4 items	.73	NR	NR	NR	
Stoddard (2015)	USA	Cross-sectional	Early adolescents	196 12.86 (0.49) M&F	Children's Future Expectation Scale	.77	NR	NR	NR	
Stoddard (2018)	USA	Cross-sectional	Students	392 15.35 (1.21) M&F	Children's Hope Scale (CHS)	.82		NR	NR	
Strokoff (2015)	USA	Cross-sectional	Students	879 17-28 (19.0 (1.24)) M&F	1 item	NR	NR	NR	NR	
Su (2017)	China	Cohort	Left-behind children and comparison peers	897 14.09 (1.40) M&F	Children's Future Expectation Scale Hopefulness about Future Scale	.81 .77	NR	NR	NR	
Suizzo (2017)	USA	Cross-sectional	Adolescents from low-income families	183 11-13 (11.86 (0.56)) M&F	Youth Life Orientation Test (YLOT)	.78	NR	NR	NR	
Sulimani-Aidan (2011)	Israel	Cross-sectional	Adolescents in residential care	277 17-22 (19.5) M&F	Life Orientation Test – Revised (LOT-R) 26-item Future Expectations Scale based on The Future Expectations Scale for Adolescents and My Future Questionnaire	.64 .87 for overall scale, .64 – .82 for subscales	NR	NR	NR	
Sulimani-Aidan (2019)	Israel	Cross-sectional	Adolescents in residential care	148	Children's Hope Scale (CHS)	.90 for overall scale, .79 &	NR	NR	NR	

				16-19 (17.5 (0.88)) M&F		.83 for subscales			
Sulkers (2013)	Netherlands	Case-control	Adolescents with cancer and comparison peers	99 12-18 (14.2 (1.63)) M&F	Youth Life Orientation Test (YLOT)	.90 & .85 in both samples overall, .80 – .84 subscales	NR	NR	NR
Sumi (1997)	Japan	Cross-sectional	Female students	176 18.7 (1.4) F	Life Orientation Test (LOT)	.78	NR	Construct validity	The translated Japanese version had similar factor structure to the original version
Sumi (1997)	Japan	Cross-sectional	Female students	144 18.8 (1.4) F	Life Orientation Test (LOT)	.75	NR	NR	NR
Supervia (2020)	Spain	Cross-sectional	Students	1,602 12-17 (14.11 (1.47)) M&F	Life Orientation Test – Revised (LOT-R)	.76 & .78	NR	NR	NR
Swanston (1999)	Australia	Cross-sectional	Sexually abused adolescents and comparison peers	51 18.19 (1.28) M&F	The Hunter Opinions and Personal Expectations Scale (HOPES-20) - Hopefulness Subscale	NR	NR	NR	NR
Synder (2005)	USA	Cross-sectional	Students	116 19.0 (1.7) M&F	Trait Hope Scale	.90	NR	NR	NR
					State Hope Scale	.86	NR	NR	NR
					Life Orientation Test – Revised (LOT-R)	.81	NR	NR	NR
Synnder (1997)	USA	Development and validation	Adolescents with and without chronic diseases	1,172 7-17 M&F	Children's Hope Scale (CHS)	.72 – .86	.71 & .73 across samples	Construct validity	2 factors accounting for 32.5 and 25.9% of the total variance respectively; both factors positively correlated (0.52 & 0.61 across samples)
								Convergent validity	Parent's rating of children's hope correlated positively with children's actual scores across time points. Scores on the scale across four samples correlated positively and significantly with the five subscales of the Self-Perception Profile for Children-competence. Children scoring higher on the scale exhibit a pattern of perceived control reflecting a

									cognitive (attributional) attachment to positive outcomes (0.13-0.52, P<0.01), and a slight propensity to distance from negative outcomes (-0.07- -0.24). Positive correlation with self-worth (0.23-0.55). Negative correlation with depression (-0.27 - -0.48)
								Discriminant validity	Negative correlation with Hopelessness as expected (-0.18 - -0.24). No correlation with intelligence
								Predictive validity	The scores on the scale and cumulative percentile scores on the Iowa Test of Basic Skills were related positively and significantly, r (100) = .50, p < 0.001
								Incremental validity	Using the Iowa scores as the criterion variable in hierarchical multiple regressions, forcing the global self-worth subscale of the SPP-C into the equation at Step 1 resulted in R2 = .04, p < .05; when hope scores were forced in at Step 2, the prediction was augmented, increment in R2 (referenced as A R2 subsequently) = .22, p < .001.
Szczytko (2019)	USA	Development and validation	Students	665 15.0 M&F	Environmental Literacy Instrument for Adolescents (ELI-A)	.75 for hope subscale	NR	Content validity Construct validity	Scale tested for readability using a pilot sample of 20 students 3-factor structure on PCA: CFI=1.00, RMSEA=0.000, SRMR=0.001
Szyndler (2005)	Australia	Cross-sectional	Adolescents with cystic fibrosis	52 15.06 (1.98) M&F	The Hunter Opinions and Personal Expectations Scale (HOPES-20) - Hopefulness Subscale	NR	NR	NR	NR

Taheri (2021)	Iran	Cross-sectional	Female students	373 15-19 (16.9 (0.65)) F	Snyder's Hope Scale	NR	NR	NR	NR
					EPOCH	NR	NR	NR	NR
Tak (2014)	Netherlands	Trial	Students	1,341 13.91 (0.55) M&F	Life Orientation Test – Revised (LOT-R)	.63 – .75	NR	NR	NR
Talib (2017)	Malaysia	Cross-sectional	General adolescent population	1,376 13-18 M & F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Tan (2014)	Singapore	Cross-sectional	High- ability students	298 17.8 M&F	Life Orientation Test – Revised (LOT-R)	.74	NR	NR	NR
Tanner (2014)	Australia	Cross-sectional	Students	2,572 12-18 M&F	Life Orientation Test – Revised (LOT-R)	.74	NR	NR	NR
Tate (2019)	Australia	Trial	Adolescents with acquired brain injury	43 14-19 M&F	Abbreviated Herth Hope Index	NR	NR	NR	NR
Tatke (2014)	India	Trial	Female adolescents	58 10-13 F	Children's Attributional Style Questionnaire	NR	NR	NR	NR
Taylor (2020)	USA	Cohort	Latinx youth	123 11.54 M&F	Life Orientation Test – Revised (LOT-R)	.64 & .79 across time points	NR	NR	NR
Taylor (2020)	Australia	Cross-sectional	Students	282 15.31 (0.52) M&F	EPOCH	.86	NR	NR	NR
Taysi (2016)	Turkey	Cross-sectional	Students	821 9-11 (10.0 (0.26)) M&F	Children's Hope Scale (CHS)	.66 – .74 across time points	NR	NR	NR
Tejada-Gallardo (2020)	Spain	Cross-sectional	Students	493 14-18 (15.33 (0.56)) M&F	Life Orientation Test – Revised (LOT-R)	.71 for optimism and .61 for pessimism subscales	NR	NR	NR
Teodorczuk (2019)	South Africa	Trial	Adolescents living in child and youth care centers	29 14-18 (16.31 (1.37)) M&F	Children's Hope Scale (CHS)	.71	NR	NR	NR
Tetzner (2019)	Germany	Cohort	Early adolescents	7,272 14.1 M&F	Life Orientation Test (LOT)	.70 & .74 across time points	NR	NR	NR
Thiruvenkadam (2016)	India	Cross-sectional	Students	2,014 12-15 M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Thompson (2017)	USA	Cross-sectional	Students	119	Work Hope Scale	.88	NR	NR	NR

				11-18 (15.57 (1.50) M&F					
Tirrell (2019)	El Salvador	Validation	General adolescent population	888 9-15 (11.6 (1.7)) M&F	12- item Hopeful Future Expectations Scale	NR	NR	Cross-cultural adaptation Construct validity Measurement invariance	Items translated to Spanish and back-translated to English One factor structure with excellent model fit: $\chi2$ (9) = 4.80, p = 0.852; RMSEA = 0.000; CFI = 1.000; TLI = 1.009; SRMR = 0.010 Invariance across age, gender, Compassion International status, i.e., CI-supported or not, established
Tirell (2021)	El Salvador	Cohort	Youths in compassion international programs	1205 9-18 (13.03 (1.87)) M&F	Hopeful Future Expectations Scale	.83 and .84	NR	NR	NR
Tomlinson (2017)	Canada	Cross-sectional	Students	282 8-18 (13.37 (2.12)) M&F	The Positive Schema Questionnaire	.86 for optimism subscale	NR	NR	NR
Tremolada (2020)	Italy	Cross-sectional	Adolescents with leukemia and comparison peers	60 8-18 (13.14 (2.86)) M&F	Ladder of Life Instrument	NR	NR	NR	NR
Tsuzuki (2012)	Japan	Cohort	Students	912 5th-12th grade M&F	Time Perspective Scale for Early Adolescents – Hope Subscale	NR	NR	Construct validity	Four factors on factor analysis
Tusaie (2006)	USA	Cross-sectional	Rural students	132 14-18 M&F	Life Orientation Test – Revised (LOT-R)	.71	NR	NR	NR
Tyc (2005)	USA	Cross-sectional	Adolescents with and without cancer	369 12-18 (14.4 (1.8)) M&F	Youth Life Orientation Test (YLOT)	.83 & .84 for both samples	NR	NR	NR
Tyser (2014)	USA	Cross-sectional	American-Indian youth	164 5th-12th graders M&F	Life Orientation Test – Revised (LOT-R)	.80	NR	NR	NR
Ullrich-French (2013)	USA	Cohort	Low-income youth	215 8-13 (11.16 (1.22)) M&F	Children's Hope Scale (CHS)	.85 – .90 across time points	NR	NR	NR

Utsey (2008)	USA	Cross-sectional	African-American youth	215 18-26 (19.17 (1.78)) M&F	Life Orientation Test – Revised (LOT-R)	.76	NR	NR	NR
Vacek (2010)	USA	Cohort	Urban ethnic minority adolescents	137 12-15 (13.61 (0.73)) M&F	Children's Hope Scale (CHS) Life Orientation Test (LOT)	.82 .70	NR	NR	NR
Valero (2015)	Switzerland	Cross-sectional	Adolescents in vocational education and training	590 18.11 (2.78) M&F	Children's Hope Scale (CHS)	.85	NR	NR	NR
Valle (2004)	USA	Validation	Students	991 10-19 M&F	Children's Hope Scale (CHS)	.84 & .83 across samples	NR	Construct validity Convergent validity	A 2-factor model showed better model fit: GFI=0.96, CFI=0.95, TLI=0.87, RMSEA=0.14 Significant positive associations with life satisfaction, social support, extraversion scale and negative associations with externalizing symptoms, internalizing symptoms, neuroticism, and stressful life events
Valle (2006)	USA	Cohort	Students	699 10-18 (14.78 (1.82)) M&F	Children's Hope Scale (CHS)	.82 & .87 across time points	.47	Predictive validity	T1 hope scores significantly predicted T2 life satisfaction (DF(1, 693)=16.57, p <0.01, DR2=0.02, R2=0.40), internalizing behaviors (DF(1,689)=11.05, p < 0.01, DR2=0.01, R2=0.39), and externalizing behaviors (DF(1, 686)=0.59, p > 0.05, DR2=0.00, R2=0.48)
Van Allen (2016)	USA	Cross-sectional	Youths with obesity	93 7-17 (11.57 (2.64)) M&F	Children's Hope Scale (CHS)	.82	NR	NR	NR
Van Allen (2016)	USA	Cohort	Adolescents with type 1 diabetes mellitus	110 10-16 (13.6 (1.87)) M&F	Children's Hope Scale (CHS) Life Orientation Test – Revised (LOT-R)	.76 .83	NR NR	NR NR	NR NR
Van Breda (2017)	South Africa	Cohort	Adolescents leaving residential care	52 16-21, 86.5% aged 16-19 M&F	Youth Ecological Resilience Scale (YERS) – Optimism Subscale	.71 – .92	NR	NR	NR

Van Middendorp (2001)	Netherlands	Cross-sectional	Adolescent girls with chronic fatigue syndrome	36 13-18 (15.2 (1.4)) F	Ultrecht Coping List for Adolescents (UCL-A) – Optimism Subscale	.61 – .85	NR	NR	NR
Van Ryzin (2009)	USA	Cohort	Students	283 15.3 M&F	Snyder's Hope Scale	.79 & .77 across time points	NR	NR	NR
Vaughn (2009)	USA	Cross-sectional	Adolescents in summer residential programs	338 14-18 (15.46 (0.99)) M&F	Children's Hope Scale (CHS)	.78 for overall scale, .81, & .89 for subscales	NR	NR	NR
Vela (2017)	USA	Cross-sectional	Mexican-American adolescents	131 14.47 (0.61) M&F	Snyder's Hope Scale	.81	NR	NR	NR
Venning (2007)	Australia	Cross-sectional	Children with chronic illness	53 8-17 (13.0 (2.57) M&F	Children's Hope Scale (CHS)	.74	NR	NR	NR
Venning (2009)	Australia	Cross-sectional	Students	3,913 13-17 M&F	Snyder's Hope Scale	.83 for overall scale, .79, & .67 for subscales	NR	Construct validity	Two-factor solution explaining a total of 58.6% of the variance
Vera (2017)	USA	Cross-sectional	Ethnically diverse adolescents	163 12-15 M&F	Vocational Hope Scale	.68	NR	NR	NR
Verma (2016)	India	Cross-sectional	HIV/AIDS orphans non-HIV/AIDS orphans	236 11.98 M&F	Hope Scale for Children	.96	NR	NR	NR
Veronese (2012)	Palestine	Cross-sectional	Adolescents exposed to political violence and comparison peers	226 8-12 (10.81 (1.98)) M&F	Youth Life Orientation Test (YLOT)	NR	NR	Cross-cultural adaptation	Scale first translated from English to Arabic and then back translated by two Palestinian teachers of English, to verify the equivalence of the translations
Veronese (2019)	Israel	Cross-sectional	Children exposed to military violence	286 7-16 (12.02 (2.05)) M&F	Children's Hope Scale (CHS)	.76 & .71	NR	NR	NR
Veronese (2019)	Niger	Cross-sectional	Internally displaced adolescents	225 14-18 (16.0 (1.36)) M&F	12 items	NR	NR	Construct validity	A 3-factor model provided a good fit for the empirical data: X2 (26) = 77.38, p<0.001, NC = 2.97, NFI = 0.96, NNFI = 0.96, CFI = 0.96, RMSEA = 0.06, AIC = 137.40
Visser (2013)	USA	Cross-sectional	Ethnically diverse adolescents	386 18-46 (19.6 (3.12)) M&F	Trait Hope Scale	.81	NR	NR	NR
Vohra (2020)	India	Cross-sectional	Students	300 Class 6-8	Values in Action Inventory of	.83 for Hope Subscale	NR	NR	NR

				M&F	Strengths for Youth (VIA-Youth)				
Wagner (2015)	Germany	Cross-sectional	Students	378 10-17 M&F	Values in Action Inventory of Strengths for Youth (VIA-Youth)	NR	NR	NR	NR
Walsh (2010)	USA	Trial	Young offenders	86 14-17 (15.8) M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Wandeler (2011)	Switzerland	Cohort	Trainees	414 17.4 (0.84) M&F	Snyder's Hope Scale	.73 – .79 across time points	NR	NR	NR
Wang (2005)	Taiwan	Cross-sectional	Students	441 16-20 (17.2) M & F	Coping Behavior Inventory	.72	NR	NR	NR
Wang (2014)	USA	Cross-sectional	Adolescents with heart disease	114 12-20 M&F	Life Orientation Test – Revised (LOT-R)	NR	NR	NR	NR
Wang (2016)	Taiwan	Cross-sectional	Students	368 11.61 (0.56) M&F	Optimism Scale (OS)	NR	NR	NR	NR
Wang (2017)	China	Cross-sectional	Students	231 18.48 (0.58) M&F	Snyder's Hope Scale	.75	NR	NR	NR
Wang (2018)	China	Validation	Students	3653 11.4 (1.0) M&F	Social and Emotional Health Survey - Primary (SEHS-P)	.80 for optimism subscale	NR	Cross-cultural adaptation	Scale forward-translated to Chinese and back-translated to English, modifications made to the translation and then reviewed by two teachers for readability
								Construct validity	The second-order model with one higher-order factor (i.e., covitality) and four lower-order factors (i.e., gratitude, optimism, zest, and persistence) showed good model fit
								Measurement invariance	Scale invariant across males and females
								Concurrent validity	Significant and large correlation (all ps < 0.001) with self-reported prosocial behavior at school (r = 0.65), depressive symptoms (r = −0.32), verbal or relational victimization (r = –0.17), physical victimization (r = −

									0.15), total victimization (r = –0.18), verbal or relational perpetration, physical perpetration, and total perpetration (all rs = –0.25). In addition, covitality was significantly and positively (all ps < 0.001) related to students' final exam grades six months later, including Chinese (r = 0.13), math (r = 0.18), and English (r = 0.18)
Wang (2018)	USA	Cross-sectional	General adolescent population	361 11-13 (11.86 (0.66)) M&F	Optimism Scale (OS)	.92 total, .92 – .93 across settings	NR	NR	NR
Wang (2020)	China	Cross-sectional	Students	231 16-20 M&F	Snyder's Hope Scale	.75	NR	NR	NR
Warren (2009)	USA	Cross-sectional	Inner- city youth	103 11-14 (12.91 (0.88)) M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Washington (2018)	USA	Cross-sectional	Students	494 3rd-6th graders M&F	Peer Life Orientation Test (PLOT)	.71	NR	NR	NR
Webber (2018)	USA	Validation	Low-income youth	2,063 12.3 (0.85) M&F	School Success Profile -Success Orientation Scale	.92	NR	Construct validity Measurement invariance	CFA supported the hypothesized one-factor model Full scalar invariance supported across gender (χ2 (98) = 270.667, p = 0.000, CFI = 0.994, TLI = 0.994, RMSEA = 0.042) and four racial/ethnic groups i.e., African American, Caucasian, Hispanic/Latino, Native American (χ2 (224) = 411.227, p = 0.000, CFI = 0.995, TLI = 0.996, RMSEA = 0.041)
Weber (2010)	USA	Cross-sectional	Rural adolescents	179 14-18 (15.6) M & F	Life Orientation Test (LOT-R)	.78	NR	NR	NR
Weber (2012)	Switzerland	Cross-sectional	Students	174 13-19 (16.45 (1.28)) M&F	Values in Action Inventory of Strengths for Youth (VIA-Youth)	.66 – .91, median 0.77	NR	NR	NR
Weber (2012)	Switzerland	Cross-sectional	Students	247	Values in Action Inventory of	.77	NR	NR	NR

				10-14 (11.77 (0.658)) M&F	Strengths for Youth (VIA-Youth)				
Wei (2016)	China	Cross-sectional	Children affected by parental HIV/AIDS	790 6-17 (10.51 (1.99)) M&F	Hopefulness about Future Scale	.73	NR	NR	NR
Whitehead (2018)	UK	Trial	Bereaved adolescents and comparison peers	81 8-17 (11.01 (1.91)) M&F	Resiliency Scale for Children and Adolescents – Optimism Subscale	NR	NR	NR	NR
Williams (2010)	USA	Validation	Children with cancer and comparison peers	207 7-18 (12.95 (3.95)) M&F	Youth Life Orientation Test (YLOT)	NR	NR	Construct validity Measurement invariance	Adequate fit for the 2-factor model: x^2 = 298.621, df = 195, p = 0.000, TLI = 0.908, CFI = 0.902, RMSEA = 0.059 Configural and strong invariance across groups (with vs without cancer) established
Wilson (2005)	USA	Cross-sectional	Students	369 Middle Schoolers M&F	Children's Hope Scale (CHS)	.87	NR	NR	NR
Wilson (2018)	Ghana	Cross-sectional	Students	717 15-22 M&F	Integrative Hope Scale (HIS)	.79	NR	NR	NR
Wong (2009)	Singapore	Cross-sectional	Students	334 15.6 (0.59) M&F	Children's Hope Scale (CHS) Life Orientation Test (LOT-R)	.82 overall, .69 & .75 for subscales .67 overall, .62 & .59 for subscales	NR	NR	NR
Wong (2017)	China	Cross-sectional	Students	4,591 10-22 (14.15 (1.74) M&F	Beck Hopelessness Scale	.90 & .89	NR	NR	NR
Woods (2013)	USA	Cross-sectional	Adolescents with chronic illnesses	102 8-19 (13.1 (2.37) M&F	Children's Hope Scale (CHS)	.87 & .86 across time points	NR	NR	NR
Wootton (2017)	England Wales	Cross-sectional	General adolescent population	7,628 16.32 (0.68)) M&F	Children's Hope Scale (CHS) Life Orientation Test (LOT-R)	.75 .76	NR	NR	NR
Worrell (2001)	USA	Cross-sectional	At-risk students	97 14-18 (18.67 (1.24)) M&F	3 items	NR	NR	NR	NR

Worrell (2007)	USA	Validation	Academically gifted students	815 11-18 (14.4 (1.4)) M&F	Zombardo Time Perspective Inventory	.75 for future subscale, .72 – .78 across gender and grade	NR	Construct validity Convergent validity	5-factor model accounting for 27.6% of the total variance Positive correlation with hope, perceived life chances and seriousness of academic cheating
					State Hope Scale	.80 for total sample, .76 – .83 across gender and grade	NR	NR	NR
Worrell (2013)	Germany USA	Development and validation	General adolescent population	616 12-20 M&F	Adolescent Time Attitude Scale (ATAS)	.77 – .83 in the US sample, .77 – .88 in the German sample	NR	Content validity Construct validity Measurement invariance	Adolescents agreed that the items were appropriate through FGDS, provided suggestions for making items more specific and less redundant 6-factor structure in both samples: US sample (CFI = 0.86, NNFI = 0.85, SRMR = 0.07, RMSEA = 0.06); German sample (CFI = 0.97, NNFI = 0.96, SRMR = 0.05, RMSEA = 0.03 Configural, metric, and scalar invariance across culture established
Worrell (2019)	USA	Cross-sectional	Students	1,048 12-20 M&F	Children's Hope Scale	.82 (.68 & .75)	NR	NR	NR
					Life Orientation Test (LOT)	.74	NR	NR	NR
Worsley (1998)	Australia	Validation	Students	958 15-18 (16.1) M&F	Questionnaire of Environmental Concern - Environmental optimism subscale	.71 for environmental optimism subscale	NR	Construct validity	7 factors on PCA accounting for 49% of the variance
Wray (2013)	USA	Cohort	Students	5,375 14-18 M&F	2 items	NR	NR	NR	NR
Wu (2020)	China	Cohort	Students	189 13.26 (0.73) M&F	Adolescent Well-Being Scale (AWBS)	.85 & .87 across time points for the hopeful future expectations subscales	NR	Construct validity Measurement invariance	6-factor structure: CFI=0.96 & 0.94, TLI=0.94 & 0.93, RMSEA=0.07&0.07 Measurement invariance across time points established
Wurster (2021)	USA	Cross-sectional	Students	145	The Therapeutic Factors Inventory -	.90 & .92 for hope subscale	NR	NR	NR

				18-21 (18.46 (0.56)) M&F	Short Form (TFI-S) - Instillation of Hope subscale	across time points			
Wyman (1993)	USA	Cohort	Urban children exposed to psychosocial stress	136 9-11 M&F	Children's Future Expectations Scale	.70	NR	NR	NR
Xiang (2020)	China	Cross-sectional	Students	2,792 11-24 (16.45 (2.62)) M&F	Children's Hope Scale (CHS)	.87 (omega)	NR	Construct validity	Acceptable data fit for the 2-factor model: χ2/ df= 18.74, CFI = 0.97, TLI = 0.94, RMSEA = 0.08, and SRMR = 0.03
Xiang (2020)	China	Cohort	Students	1,283 17-22 (19.33 (0.78)) M&F	Snyder's Hope Scale	.71 – .78 across time points	NR	Measurement invariance	Longitudinal measurement invariance supported
Xie (2018)	China	Cross-sectional	General adolescent population	1,472 14.35 (1.25) M&F	Adolescents' Optimism Scale	NR	NR	NR	NR
Yager-Elorriaga (2014)	USA	Cross-sectional	Latino youth	29 16.62 (1.14) M&F	Children's Hope Scale (CHS)	.79	NR	NR	NR
Yang (2021)	USA China	Validation	Early adolescents	2,233 11-14 12.20 (0.81) 12.45 (0.74) M&F	Children's Hope Scale (CHS)	.80, .68, and .64 for the Chinese Sample; .89, .81, and .80 for the American sample	NR	Construct validity	For both samples, all of the fit indexes for the one-factor model and the two-factor model met the criteria for adequate model fit, however, the one-factor model revealed a better fit for the Chinese sample
								Measurement invariance	Configural invariance for the one-factor (χ2 (df) =139.217 (18), P=0.000, CFI=0.976, TLI=0.960, 0.0322, RMSEA=0.055) and two-factor (χ2 (df) =126.330 (16), P=0.000, CFI=0.978, TLI=0.959, 0.0329, RMSEA=0.056), as well as metric invariance for the one-factor (χ2 (df) =166.880 (23), P=0.000, CFI=0.972, TLI=0.963, 0.0374, RMSEA=0.053) and two-factor (χ2 (df) =151.445 (20), P=0.000, CFI=0.974, TLI=0.961, 0.0378, RMSEA=0.054 models supported across cultures. Partial scalar invariance was

									achieved for the one-factor model (change in CFI of 0.007 and change in RMSEA of 0.002)
Yarcheski (2001)	USA	Cross-sectional	Early adolescents	131 12-14 (13.1 (0.46)) M&F	Hopefulness Scale for Adolescents	.73	NR	NR	NR
Yarcheski (2004)	USA	Cross-sectional	Early adolescents	131 12-14 (13.1 (0.8)) M&F	Life Orientation Test (LOT)	.76	NR	NR	NR
Yarcheski (2011)	USA	Cross-sectional	Students	134 12-14 (12.9 (0.58)) M&F	The Hopefulness for Future Scale	.71	NR	NR	NR
Yates (1999)	USA	Cross-sectional	Students	145 9-12, 64.1% aged 11-12 M&F	Children's Attributional Style Questionnaire	NR	NR	NR	NR
Yetter (2014)	USA	Cross-sectional	Rural native American youth	699 15-21 (15.9 (1.59) M&F	Snyder's Hope Scale	.75	NR	NR	NR
Yeung (2015)	China	Cross-sectional	Students	712 15.19 (1.63) M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Yildiz (2016)	Turkey	Cross-sectional	Students	300 14-19 (15.51 (1.09)) M&F	Positivity Scale	.75	NR	NR	NR
Yildiz (2017)	Turkey	Cross-sectional	students	312 13-19 (16.26 (1.21)) M&F	Positivity Scale	.80	NR	NR	NR
Yin (2019)	China	Cross-sectional	Late adolescents	381 17.69 (1.12) M&F	State Hope Scale	.83 – .88	NR	NR	NR
You (2008)	USA	Cross-sectional	Students	866 5th-12th graders M&F	Children's Hope Scale (CHS)	.89	NR	NR	NR
You (2009)	USA China	Cross-sectional	Students	84 18-21 18.41 (0.72) 18-28 19.69 (1.64) M&F	Life Orientation Test (LOT)	.62 overall, .69 & .61 for subscales	NR	NR	NR

Study	Country	Design	Population	N / Age	Measure	Reliability	Validity (col7)	Validity type	Findings
Yu (2013)	South Korea	Cross-sectional	Students	422 11.75 (0.77) M&F	Life Orientation Test – Revised (LOT-R)	.85 for both self- and father report	NR	Construct validity	EFA yielded 2 factors
Yu (2016)	China	Cross-sectional	Students	395 17-27 (19.05 (1.34)) M&F	Personal Optimism Scale	.74	NR	NR	NR
Yu (2016)	USA	Cross-sectional	Students	235 18-42 (19.99 (2.67)) M&F	Life Orientation Test – Revised (LOT-R) Future Orientation Scale	.78 – .86 .75 – .81	NR	NR	NR
Yu (2019)	USA	Cohort	European-American adolescents	290 18.22 (0.36) M&F	Life Orientation Test – Revised (LOT-R)	.84 & .85 across time points	NR	NR	NR
Yu (2019)	USA	Cross-sectional	Asian and European adolescents	388 18-29 (19.75 (1.59)) M&F	Life Orientation Test – Revised (LOT-R)	.84 & .86 across samples	NR	NR	NR
Yuksel (2019)	Turkey	Trial	Students	91 18.72 (0.92) M&F	Ways of Coping Inventory - Optimistic Approach Subscale	.71 – .82 for Optimistic Approach Subscale	NR	NR	NR
Zagorska (2014)	Poland	Trial	Athletes	42 16.49 (1.38) M&F	Life Orientation Test – Revised (LOT-R) Hope for Success Questionnaire	NR	NR	NR	NR
Zak-place (2004)	USA	Cross-sectional	Students	202 18-22 (19.11 (1.29)) M&F	Life Orientation Test (LOT)	.84	NR	NR	NR
Zanon (2014)	Brazil	Cross-sectional	Students	344 16.2 (1.0) M&F	Life Orientation Test – Revised (LOT-R)	.80	NR	NR	NR
Zeng (2019)	China	Validation	Students	17,854 Adolescents M&F	EPOCH	.80 for optimism subscale	.12 – .21	Construct validity	CFA confirmed the 5-factor structure with good model fit: [$\chi2(160) = 8,934$, CFI = 0.931, TLI = 0.919, RMSEA = 0.055, SRMR = 0.041
								Measurement invariance	Strict invariance was supported for gender and area, and strong invariance was supported for school type and location
								Convergent and	Correlations of optimism subscale with age (-0.013),

								divergent validity	gender (0.004), grade (0.067), coping (0.546), empathy (0.434), grit (0.412), growth mindset (0.186), depression (-0.166), anxiety (-0.199), physical health (0.533), relationships with teachers (0.257), peers (0.197), parents (0.206), sense of belonging (0.408), class relationships (0.382), classroom belonging (0.420), interpersonal skills (0.499), school performance (0.388), performance motivation (0.337-0.601), mastery motivation (0.497 & 0.196), internal motivation (0.195-0.393), external motivation (-0.036)
Zhang (2014)	China	Cross-sectional	Students	241 13.5 (1.19) M&F	Children's Hope Scale (CHS)	.74	NR	Cross-cultural adaptation	Scale forward-translated to Chinese and back-translated to English, discrepancies resolved
Zhang (2019)	China	Cross-sectional	Left-behind children	1,091 13.07 (1.23) M&F	Children's Hope Scale (CHS)	.81	NR	NR	NR
Zhou (2018)	China	Cross-sectional	Adolescents affected by earthquake	397 16.42 (1.67) M&F	State Hope Scale	.85 overall, .72 & .74 for subscales	NR	Construct validity	Excellent fit indices were obtained via CFA with two factors [$\chi2/df$= 2.53, CFI= 0.99, TLI = 0.98, RMSEA = 0.062, SRMR = 0.014]
Zhou (2021)	China	Cohort	Early adolescents	712 12.92 M&F	Positivity Scale	.82 – .86 across time points	NR	NR	NR
Ziadni (2011)	USA	Cross-sectional	Adolescents with Sickle Cell Disease	44 12-19 (15.0 (1.89)) M&F	Children's Hope Scale (CHS)	.77	NR	NR	NR
Zlotnick (2019)	Israel	Cross-sectional	Immigrant and non-immigrant youth	567 11th&12th graders M&F	Children's Hope Scale (CHS)	.82 overall, .86 &.89 for subscales	NR	NR	NR
Zou (2016)	China	Cross-sectional	Students in late childhood and adolescence	2,738 9-19 (12.75 (2.53)) M&F	Life Orientation Test – Revised (LOT-R)	.73 overall, .67 & .79 for optimism & pessimism subscales, respectively	NR	Construct validity	2-factor structure sustained across groups on PCA
Zou (2018)	China	Cross-sectional	Students in late childhood and adolescence	1,189 14.71 (1.60) M&F	Life Orientation Test – Revised (LOT-R)	.70 & .75 for both samples	NR	NR	NR

Zou (2020)	China	Cross-sectional	Students	652 11-20 (14.55 (1.82)) M&F	Life Orientation Test – Revised (LOT-R)	.83	NR	NR	NR
Zuffiano (2019)	UK	Validation	Students	742 10.75 (0.52) M&F	Positivity Scale	.84 total sample, .81 & .84for primary and secondary school samples	NR	Construct validity

Measurement invariance

Concurrent validity | A revised one-factor structure showed a better fit to the data χ2 (19) = 77.056, p < 0.001, CFI = 0.963, TLI = 0.945, RMSEA = 0.065, SRMR = 0.03

Configural, metric and scalar invariance was supported for early and late adolescents

Across both developmental groups, POS was positively associated with prosocial behavior and negatively associated with externalizing and internalizing problems |
Zusevics (2014)	USA	Trial	Urban students	214 16.2 (1.36) M&F	Children's Hope Scale (CHS)	NR	NR	NR	NR
Arslan (2022)	Turkey	Cross-sectional	Students	343 10-15 (12.3 (1.3)) M & F	Optimism subscale of the Social and Emotional Health Survey-Primary (SEHS-P)	.73 – 0.90	NR	Construct validity	CFA yielded an acceptable data-model fit, χ^2 = 336.46, df = 98, $p < .001$, CFI = .91, TLI = .90, RMSEA (95% CI) = .08 (.07, .09)
Azadianbojnordi (2022)	Iran	Cross-sectional	Students	353 18.1 (1.4) M&F	Academic Hope Scale	.91	NR	Content validity	Educational psychology experts gauged the content validity as desirable
Erdogdu (2021)	Turkey	Cross-sectional	Students	435 16.2 M&F	LOT	.81	NR	NR	NR
Hebert (2022)	Canada	Cross-sectional	Victims of child abuse	8192 14-18 (15.9) M&F	Beck Hopelessness Scale	.58 (Omega)	NR	NR	NR
Iida (2021)	Japan	Validation	Students	995 4-6 graders M&F	Social and Emotional Health Survey-Primary (SEHS-P)	Alpha and Omega coefficients = .83 to .97	.70 – .77	Cross-cultural adaptation

Construct validity | Scale translated to Japanese then backtranslated to English

CFAs supported a four-factor model and a second-order model. Based on the model fit indices, the covitality model, and the principle of parsimony, the second-order model was chosen as the final model. |

								Criterion validity	SEHS-P subscale scores correlated negatively with emotional difficulties ($r = -.32$ to $-.47$, $p < .01$) and behavioral difficulties ($r = -.20$ to $-.27$, $p < .01$). SEHS-P subscales correlated negatively with Questionnaire Utility Security ($r = -.22$ to $-.42$, $p < .01$) and positively with Questionnaire Utility Approval ($r = .32$ to $.41$, $p < .01$).
Andretta (2022)	USA	Cross-sectional	Academically talented students	967 14.27 (1.42) M&F	Adolescent and Adult Time Inventory-Time Attitude Scales (AATI-TA)	0.92 for future positive subscale	NR	Construct validity	CFA supported the six-factor structure as the best-fitting model in this sample (CFI = .963, NNFI = .959, RMSEA = .037)
de Oliveira (2021)	Brazil	Validation	Students	976 5-16 (10.4 (3.4)) M&F	YLOT	Alpha = .61 – .73 Omega = .85 – .88	NR	Cross-cultural adaptation	Scale translated to Portuguese then backtranslated to English by independent translators. Both versions were then compared for equivalence. Final version piloted using a sample of children and adolescents
								Construct validity	CFA suggested an oblique two-factor model best fit the data
								Measurement invariance	Age group configural model demonstrated good fit. The metric model demonstrated an equivalent fit to the configural model (i.e., ΔCFI = .004, ΔRMSEA = .001, and ΔSRMR = .015), indicating full metric invariance was achieved. A scalar invariance model fit the data properly and improved CFI, RMSEA, and SRMR indexes. The differences between the scalar and metric models suggested full scalar invariance was achieved (i.e., ΔCFI = .010, ΔRMSEA = .007, and ΔSRMR = .006).
								Convergent validity	Optimism and pessimism demonstrated small to

Author	Country	Design	Population	N / Age / Sex	Tool	Reliability (α)		Validity type	Validity results
									moderate correlations with subjective well-being measures (life satisfaction, positive and negative affect)
Knowles (2022)	USA	Cross-sectional	First-time adolescent arrestees	1147 14-21 M	Future Outlook Inventory	.66	NR	NR	NR
					Perceptions of Opportunities Scale	.90			
Ahrnberg (2021)	Finland	Cross-sectional	Students	195 14.4 (0.88) M & F	VIA Youth-measure 96 to measure hope	.848	NR	NR	NR
Alexander (2022)	USA	Mixed methods (cross-sectional and qualitative)	Students	639 Grade 5-12 M & F	Educational Hope Scale for Adolescents	.80-.88	NR	Construct validity Criterion validity Measurement invariance	CFA revealed three factor model fit the data well (χ^2 (87) = 209.63, p < .001; RMSEA=0.05, CFI=0.97, SRMSR=0.03 Significantly correlated with the CHS scale Invariant among white and Latinx students and partially invariant for school, gender, and free and reduced lunch groups
Alferi 2021	Italy	Cross-sectional	General population	3271 12-18 (16.07(1.35)) M &F	Adult Dispositional Hope Scale	Pathways (α = .772) and Agency (α = .687).	NR	Construct validity Convergent validity Measurement invariance	CFA revealed bi-dimensional structure of the tool (CFI = 0.968, TLI = 0.953, RMSEA = 0.052, SRMR = 0.031) Correlational analysis indicated convergent validity Tool demonstrated invariance across gender
					LOT-R	Positive (α = .726) and Negative (α = .684). A		Construct validity	Forward and back translations CFI = 0.988, TLI = 0.978, RMSEA = 0.042, SRMR = 0.026
Arslan (2022)	Turkey	Trial	Students	53 15-18 (15.60, (0.75)) M & F	Optimism and Pessimism Measure (OPM-Short)	.84	NR	NR	NR
Asanjarani (2021)	Iran	Cross-sectional	Students	408 11-18 (14.13 (1.52))	The Optimism and Pessimism Questionnaire (OPQ)	.81	NR	Construct validity	CFA results showed adequate data-model fit statistics (χ^2 = 39.59, df = 4, p < .001, TLI =

									.94, CFI = .97, RMSEA [95% CI] = .099 [.069, .13])
Ashmitha (2022)	India	Tool validation	Students	312 12-16 (13.63 (0.90)) M & F	EPOCH Positivity scale (to assess optimism)	.77 .92	NR	NR	NR
Ashworth (2022)	UK	Cross-sectional	Students	297 11-14 (11.95 (0.85)) M &F	LOT-R	.60–.78	NR	NR	NR
Balaguer (2021)	Spain	Cross-sectional study	Students	1507 12-18 M & F	LOT-R CHS	.84 Agency=.532 Pathway= .614	NR	NR	NR
Remillard (2022)	USA	Cross-sectional	Foster youth	1245 14-17 M & F	LOT-R	.75	NR	NR	NR
Asher (2019)	Greece	Cross-sectional	Refugee children	83 9-12 (n=48) 12-16 (n34) M & F	CHS	.72	NR	NR	NR
Boileau (2021)	Canada	Cross-sectional	Students	235 17-36 (19.14 (2.14)) M & F	LOT-R	optimism = .82 pessimism= .86	NR	NR	NR
Bruce (2022)	USA	Cross-sectional	Students	726 14.52 (1.94)	CHS	.87 & .89	NR	NR	NR
Buerger (2022)	Austria	Validation	Students	1651 13.13 (1.89) M & F	EPOCH-G-S	Overall=.88 Optimism subscale=.75		Construct validity Convergent validity Measurement invariance	CFA showed good model ft for the five-factor measurement model (χ2 (139) =503.171; RMSEA=0.040, SRMR=0.042, CFI=0.960, TLI=0.950) Correlation with other measures such as student life satisfaction scale, positive affect scale motivation for school scale among others. Configural, metric and scalar invariance was demonstrated across age and gender Tool translations and adaptations were done
Cerit (2021)	Turkey	Experimental	Students	70 14-17 (14.9 (0.8)) M & F	Resilience scale (Has optimism subscale)	.90	NR	NR	NR

Choi (2021)	USA	Longitudinal / Validation	National sample	3444 15 years M & F	EPOCH	.80	NR	Construct validity Convergent and divergent validity	The multidimensional five factors showed a better fit: $\chi2$ of 956.50 (df = 160) was statistically significant (p < .001), RMSEA = .04, CFI = .94, and TLI = .93) Optimism subscale had acceptable factor loadings (0.382-586) Correlation analysis showed negative association with anxiety, behavior problems, delinquency while school connectedness, and social skills scales revealed positive association
Collins (2023)	Canada	Trial	Youth from secure care centre	13 12-19 M & F	CHS	NR	NR	NR	NR
Demirtaş (2020)	Turkey	Cross-sectional	Schools	300 11-14 (12.70 (0.78)) M & F	CHS	.79	NR	NR	NR
Elizarov (2023)	Israel	Cross-sectional	Immigrants	160 12-15 M & F	CHS	NR	NR	NR	NR
Eroglu (2021)	Turkey	Cross-sectional	Students	12500 14-19 M & F	EPOCH	.88	NR	Construct validity	Five-factor structure of EPOCH is confirmed ($\chi2$/sd = 2.95; NFI = 0.94; CFI = 0.93; RFI = 0.96; GFI = 0.90; SRMR = 0.050; RMSEA = 0.053).
Fantinelli 92023)	Italy	Cross-sectional	Students	142 16-20 (17.9 (1.0)) M & F	Work hope scale	Agency=0.81, Goals= 0.77 and pathways=0.65	NR	NR	Tool translations and adaptation done
Finch (2023)	Australia	Cohort	Students	82 17.09 (0.28) M & F	MY-HERO scale (Hope and optimism subscale)	T1=.90 T2=.92 for the hope subscale	NR	NR	NR
Finnegan (2022)	UK	Cross-sectional	Students	512 16-18 M & F	Climate Change Hope Scale	NR	NR	NR	NR
Fraser (2021)	USA	Longitudinal	Students	1018 9-12th grade M & F	CHS	.87 to .92	NR	NR	NR
Fraser (2022)	Columbia	Cohort	Students	3443 9-19 (14.2 (2.8)) M & F	3 items to measure hope (taken from Child Trends	.86	NR	NR	NR

				Flourishing Children Project)					
Gadermann (2022)	Canada	Cohort	Students	1755 12-14 M & F	Optimism_ 3 items adapted from the Optimism Resiliency Inventory Subscale	.81	NR	NR	NR
Gregory (2021)	Australia	Cross-sectional	Students	76939 8-18 M & F	3 items optimism adapted from Resiliency Inventory Subscale and Middle Years Development Instrument	.75-.83	NR	NR	NR
Groves (2022)	South Africa	Cross-sectional	Adolescent mothers	109 14-19 M & F	New 12-item Hope Scale	.91	NR	NR	NR
Gunes (2021)	Turkey	Trial	Girls with central precocious puberty	51 10.34 (0.37) 10.29 (0.37) F only	Connor–Davidson Resilience Scale (CD-RISC) (optimism subscale)	NR	NR	NR	NR
Hardie (2022)	USA	Longitudinal	Children from fragile families	3013 At 15 years M & F	EPOCH	NR	NR	NR	NR
Haskins (2023)	USA	Longitudinal	General Population	3444 15 years M & F	4 items to measure optimism	NR	NR	NR	NR
Hinz, (2022)	Columbia	Cross-sectional	General population	906 11-18 M & F	LOT-R	.48	NR	Construct validity	Two-factor model fit better; CFI=0.933, TLI=0.875, .95, RMSEA=0.88 and SRMR=0.040
Holzer (2022)	Austria	Cross-sectional	Students	14-84 10-19 (12.95 92.2.10)) M & F	EPOCH-G-S	.68	NR	Construct validity Discriminant validity	CFA demonstrated adequate to excellent fit indices for the scale a second-order model (w2(146) = 721.888, p <.001, RMSEA =.052, SRMR=.050, CFI =.930 Discriminant validity between optimism and happiness (Upper 2.5%= 0.892) revealed marginal problem.
Hu 2023	China	Cross-sectional	Students	1681 12-19 (15.86 (1.72)) M & F	CHS	0.86	NR	NR	NR
Hu (2022)	USA	Longitudinal	Students	745 11-15 (12.76 (0.74)) M & F	CHS	T1=0.86 T2=0.91	NR	NR	NR

Ilari (2023)	USA	Cross-sectional	Students	186 11-14 (Median=12) M & F	4 items adapted from the Hopeful Future Expectations Scale	NR	NR	NR	NR
Iyer (2021)	USA	Trial	General population	88 114-17 M & F	EPOCH	NR	NR	NR	NR
Izadpanah (2022)	Iran	Cross-sectional	Students	50977 M & F	Academic hope questionnaire	.968	NR	NR	NR
Jakobsen (2022)	Denmark	Longitudinal	General population	3781 14-15 M & F	Total hope scale	.86	NR	NR	NR
Jiang (2022)	China	Cross-sectional	Students	1026 13.76 (1.27) M & F	Chinese version of Adult Dispositional Hope Scale	.85	NR	NR	NR
Kanter (2021)	USA	Trial	Diverse adolescent sample	119 15.84 (0.84) M & F	State Hope Scale	Pretest=.79 Posttest=.84	NR	NR	NR
Kaya (2022)	Turkey	Cross-sectional	Gifted and talented students	93 5-9th graders M & F	CHS	NR	NR	NR	NR
Kennewell (2022)	Australia	Cross-sectional	Students	61,759 9-15 M & F	Optimism measured using 3 items from the Middle Years Development Instrument	NR	NR	NR	NR
Khlomova (2021)	Russia	Cross-sectional	Students	646 12-17 M & F	LOT	α = .78, McDonald's ω = .79	NR	NR	NR
Kim (2022)	USA	Cross-sectional	Students	456 Grade 4-6 M & F	CHS	.78	NR	NR	NR
Kirby (2022)	Ireland	Trial	Students	153 11-14 (12.4 (0.70)) M & F	CHS	NR	NR	NR	NR
Korkmaz (2023)	Turkey	Cross-sectional	Students	308 16-18 (17.02 0.80)) M & F	Visions About Future Scale (VAFS) (hope subscale)	.77	NR	NR	NR
Korlat (2022)	Austria	Cross-sectional	Students	999 13.79 (1.53) M & F	EPOCH-G-S	.67 (optimism subscale)	NR	NR	NR
Kuhlman (2021)	USA	Cross-sectional	Adolescents with onset depression	88 11-18 (14.99 (1.84))	LOT	.78	NR	NR	NR
Lahdelma (2020)	Finland	Longitudinal	Students	672 12.3 (0.4)	Short version of the Achievement	.76 (hope subscale)	NR	NR	NR

				M & F	Emotions Questionnaire (3 items to assess hope)				
Lai (2022)	China	Cross-sectional	Students	231 16-20 (18.48 (0.54)) M & F	LOT-R	.74	NR	NR	NR
Lee (2023)	Canada	Cross-sectional	Youth with recurrent abdominal pain	98 8-17 (3.38 (2.85)) M & F	Positive Schema Questionnaire (PSQ) (optimism subscale)	Total scale α = .95), subscales (α = .86–.91)	NR	NR	NR
Lee (2021)	Taiwan	Cross-sectional	Students	463 10th-12th grade M & F	Inventory of Adolescent Resilience (IAR) (optimism and hope subscale)	Total scale=.89	NR	NR	NR
Li (2022)	China	Cross-sectional	Students	737 16-24 (18.42 (0.73))	Hope Scale (Snyder)	NR	NR	NR	NR
Li (2022)	China	Cross-sectional	Students	522 17-23 (19.00 (0.92)) M & F	12-item Hope Scale (HS)	.77	NR	NR	NR
Li (2021)	China	Cross-sectional	Students	365 18-14 (19.86 (1.84)) M & F	Optimistic personality scale (OPS)	NR	NR	NR	NR
Li (2021)	China	Cross-sectional	Students	1097 10.25–19.58 (15.02 (1.59)) M & F	Trait Hope Scale	Total=.79 agency= .65 pathway=.71	NR	Construct validity	CFA showed demonstrated that that the two-factor model fit the data well ($\chi2/df = 4.20$, CFI = 0.97, TLI = 0.95, RMSEA = 0.06, SRMR = 0.03).
Li (2021)	China	Cross-sectional	Students	9244 11-18 (15.11 (1.79)) M & F	Chinese version of the 6-item Revised-Life Orientation Test (CLOT-R)	.86	NR	NR	NR
Li (2022)	Taiwan	Cross-sectional	Students	450 15.81 (0.31) M & F	CHS	.85	NR	NR	NR
Lin (2022)	USA	Longitudinal	Immigrant youth	233 7th grade M & F	CHS	Overall=.87 Agency α = .78) Pathway α = .77)		Construct validity	EFA model fit indices revealed that the two-factor solution fit the data better than the one factor solution. Model 5 had an excellent model fit (i.e., $\chi2 = 8.93$, p = .11; RMSEA = .06, CFI = .99, TLI = .98, and SRMR = .02).

								Divergent validity Measurement invariance	The results demonstrated four-item one-dimensional scale, with excellent model fit. Negative association with stress. Invariance across time, by gender and generation status
Liotta (2023)	USA	Longitudinal	Young people affected by perinatal HIV	526 F1=13–24 (17) F2= 242 (19) M & F	Hope for the future was assessed using four items from the Monitoring the Future Survey	NR	NR	NR	NR
\Liu (2022)	China	Cross-sectional	Students	20,996 10-18 M & F	EPOCH	.95	NR	NR	NR
Liu (2023)	China	Cross-sectional	Chinese childhood cancer patients	412 8-17 M & F	Herth Hope Index	.78	.82	Content validity Convergent validity and discriminant validity Construct validity	Content validity index for the items ranged from 0.8 to 1.0, and that for the scale was 0.9 Positive correlation between the scale and the quality-of-life scores Negative correlation between the scale and depression scores depression score EFA revealed a three-factor model, explaining 82.74% of the total variance. CFA results showed that $\chi2/df=$ 2.20, CFI= 0.98, GFI=0.94, and RMSEA= 0.07 Standard guidelines for translations and adaptations were done. Semantic equivalence. The sematic equivalence for the translated scale was 0.916
Lorenzo-Blanco (2022)	USA	Longitudinal	Immigrant adolescents	302 13-17 (14.51 (0.88))	CHS	NR	NR	NR	NR
Lu (2022)	China	Cross-sectional	Students	1701 Grade 7-12 M & F	Snyder's Hope scale	.82	NR	NR	NR
Malinauskas (2021)	Lithuania	Trial	Students	104 16.91(1.12) M & F	Schutte Self-Report Inventory (SSRI) (optimism subscale)	.81	NR	NR	NR

Mardhiyah (2022)	Indonesia	Cross-sectional	Adolescents with thalassemia	120 10-19 M & F	CHS	.705	NR	NR	NR
Martinez-Alvarado (2021)	Mexico	Cross-sectional	Athletes	45 12-18 (16.29 (1.66)) M & F	Positivity Scale	.87	NR	NR	NR
Masood (2022)	Pakistan	Cross-sectional	Children with and without Hearing Impairment	300 12-18 M & F	Hope Trait Scale	NR	NR	NR	NR
Mehari (2023)	USA	Trial	Participants in the pilot-testing of the Empowered program	37 11-14 (12.11) M & F	CHS	General hope α = .72 Goal-specific hope α = .88	NR	NR	NR
Min (2022)	China	Trial	Adolescents from the community	497 Grade 1-3 junior high school M & F	Positive Psychological Capital Questionnaire (PPQ) (optimism and hope subscale)	NR	NR	NR	NR
Mu	China	Cross-sectional	Students	1602 15.01 (1.25)	CHS	.87	NR	NR	NR
Nazari (2022)	Iran	Cross-sectional	Students	532 12-15 (13.57 (1.01))	YLOT	.81	NR	NR	NR
Nguyen (2022)	Vietnam	Cross-sectional	General population	3978 14-18 M & F	4 items to measure optimism	.73	NR	NR	NR
Nunes (2022)	Portugal	Longitudinal	Students	481 15.59 (0.80) M & F	Visions About Future (VAF) test (optimism subscale)	α =.89 /.89 / .91	NR	NR	This study assessed a model of sense of agency which combined four indicators: setting goals, optimism, decision-making, and self-efficacy. It assessed it structural and measurement invariance of the model
O'Byrne (2021)	Canada	Cross-sectional	Students	363 17-21 (18.16 (0.79)) M & F	Positive Schema Questionnaire (optimism subscale)	Overall=.94 Optimism subscale=.89	NR	Construct validity Convergent and divergent validity	EFA showered five-factor structure, explaining 57% of the variance The tool scores correlated positively with life satisfaction and resilience scores. Negative association and negatively correlated with depression and anxiety scores.
Gunes (2021)	Turkey	Trial	Girls with central precocious puberty	102 10.34 (0.37) 10.29 (0.37) F only	Connor–Davidson Resilience Scale (CD-RISC) (optimism subscale)	NR	NR	NR	NR

Parviniannasa (2021)	Iran	Cross-sectional	Adolescents with beta-thalassemia	134 11–21 (13.6) M & F	Connor-Davidson Resilience Scale (CD-RISC) (optimism subscale) Jalowiec Coping scale (optimism subscale)	.94 .76 for optimism subscale	NR	NR	NR
Pharris (2023)	USA	Cross-sectional	Foster youth	149 13-19 (15.4) (1.33)) M & F	Hope in counselling services scale CHS	.997 .851	NR	NR	NR
Pharris (2022)	USA	Cross-sectional	General population	5000 Grades 8,10, 12 M & F	CHS	NR	NR	NR	NR
Pierce (2023)	USA	Longitudinal	Urban-born youth	3444 15 M & F	EPOCH	Optimism subscale=.62 Overall=.85	NR	NR	NR
Popham (2022)	Lebanon	Longitudinal	Refugee children	982 8–16 (11.22 (2.34)) M & F	YLOT	NR	NR	NR	NR
Qin (2022)	China	Cross-sectional	Students	521 10-12 (10.92 (0.04)) M & F	Values in Action Inventory of Strengths for Youth (VIA-Youth) (hope subscale)	NR	NR	NR	NR
Ricker (2022)	USA	Longitudinal	Students	166 14 -19 (15.86 (1.22)) M & F	Trait Hope Scale	.71	NR	NR	NR
Rueger (2023)	USA	Cross-sectional	Students	378 10-14 (11.88 (0.99))	CHS	.82	NR	NR	NR
Russo (2022)	Italy	Longitudinal /Trial	Students	140 15-19 ((16.53 (0.95)) M & F	Positivity scale	.80	NR	NR	NR
Seidl (2023)	Germany	Longitudinal	Adolescents and young adults with current and remitted anxiety disorders	1180 14-21 M & F	Optimism and pessimism (Skala Optimismus-Pessimismus-2; SOP2	NR	NR	NR	NR
Sevgili (2021)	Turkey	Cross-sectional	Children with cancer	20	The Child Well-being Assessment:	NR	NR	NR	NR

				5-15 (11.25 (3.04)) M & F	It consists of 21 questions included in the New Economics Foundation publication, Guide for Measuring Children's Well-being (optimism subscale)				
Sharp (2022)	USA	Longitudinal	Children with cancer history	254 8-17 M & F	YLOT	.81	NR	NR	NR
Skinner (2022)	China, Colombia, Italy, Jordan, Kenya, Philippines, Sweden, Thailand, North, USA	Longitudinal	General population	1329 16.67 (0.96) 17.75 (1.02) M & F	Positivity Scale Future Orientation Scale	.84 .78	NR	NR	NR
Sollom (2021)	USA	Trial	Students	359 11-12 M & F	Devereux Student Strengths Assessment (DESSA) Assessment (Optimism subscale)	NR	NR	NR	NR
Somers (2022)	USA	Cross-sectional	Students	206 16 (1.3) M & F	CHS	NR	NR	NR	NR
Sparks (2021)	USA	Longitudinal	Students	1236 13.60 M & F	Hopelessness Scale for Children	.74	NR	NR	NR
Stark (2022)	USA	Cross-sectional	Students	357 15.65 (1.32)	CHS	.83	NR	NR	NR
Streck (2022)	Germany	Cross-sectional	Students	355 13-17 (14.2 (0.5))	Hope for success scale	.77	NR	NR	NR
Sui-chu Ho (2021)	China	Longitudinal	General population	760 15-22 M & F	Snyder's hope scale	.918	NR	NR	NR
Sulimani-Aidan (2022)	Israel	Cross-sectional	At risk youth	175 16-19 (17.67 (0.63)) M & F	CHS	.93	NR	NR	NR

Tal-Saban (2022)	Israel	Longitudinal	Typically developing adolescents	148 13-18 M & F	CHS	NR	NR	NR	NR
Tejada-Gallardo (2022)	Spain	Cross-sectional	Students	493 14-18 (15.33 (0.56)) M & F	LOT-R	.71 (.72) for optimism and .61 (.58) for pessimism	NR	NR	NR
Tekin (2022)	Turkey	Cross-sectional	Students	1361 9th-12th grade M & F	LOT	NR	NR	NR	The relationship between DPQ and LOT is used as evidence for the criterion validity of DPQ
Telef (2021)	Turkey	Cross-sectional	Students	328 12-14 (13.09 (0.78) M & F	Positive Experiences at School Scale (optimism subscale)	.65 for optimism subscale	NR	Construct validity	CFA obtained acceptable fit indices for the scale: (RMSEA = 0.06, GFI = 0.93, CFI = 0.94)
Tirrell (2022)	Rwanda and El Salvador	Cross-sectional	Adolescents from rural and urban areas	Rwanda: 1,204 9-16 (11.84 (1.67)) El Salvador: 1,205 9-18 (13.03 (1.87)) M & F	Six items derived from the 4-H Study of Positive Youth Development to measure hopeful future expectations (hope)	Rwanda sample α- =.97 El Salvador sample α = .85 Rwanda Omega coefficient = .96 and .83 for El Salvador sample	NR	NR	NR
Tomlinson (2021)	Canada	Cross-sectional	Youth with abdominal pain	98 8-17 13 (3) M & F	YLOT-R	α=.87	NR	NR	NR
Turan (2021)	Turkey	Cross-sectional	Students	354 13-15 (14.3) M & F	CHS	.74	NR	NR	NR
Usán (2010)	Spain	Cross-sectional	Students	1852 12-19 (14.77 (1.80)) M & F	LOT-R	.79	NR	NR	NR
Veronese (2021)	Palestine	Cross-sectional	Children living in conflict zones	Sample 1: 1166 9-14 (11.58 (1.54)) Sample 2: 251 9-14 (11.82 (1.53)) M & F	CHS	Agency α = .687 Pathway α = .680).		NR	CHS was used to evaluate the convergent validity of War Child Agency Assessment Scale
Von Rezori (2022)	Germany	Cross-sectional	Youths with chronic conditions	304	Six-item subscales from the	Optimism subscale=.89	NR	NR	NR

				12 – 21 (7.15 (2.80)) M & F	"Developmental Resources Questionnaire for Children and Adolescents (FRKJ 8–16)" (FRKJ) (optimism subscale)				
Wang (2022)	China	Cross-sectional	Students	1156 13-19 (15.98 (0.971)) M & F	CHS	Overall=.90 Pathway=.84 Agency=.80	NR	NR	NR
Weber (2022)	Germany	Cross-sectional	Students	300 10-17 (13.20 (2.03))	The Revised, Brief VIA-Youth (hope subscale)	Hope subscale=.79	NR	NR	NR
Weinberg (2023)	Netherlands	Longitudinal	Socioeconomically diverse sample	1429 17.9 M & F	Future emotions questions scale (optimism)	α T1=.82 α T2= .79 α T3:0=.83	NR	NR	NR
Wen (2022)	Singapore	Cross-sectional	Youth from low-income families	512 7-12 (10.00 (1.44)) M & F	CHS	.749	NR	NR	NR
Wen (2022)	China	Cross-sectional	Adolescents from general population	5,503 15-29 (19.65 (1.14)) M & F	2 hope items from the Positive Psychology Capital Questionnaire (hope subscale)	.91	NR	NR	NR
Wen (2022)	China	Cross-sectional	Children from low-income families	513 13.25 (2.1) M & F	LOT-R	.78	NR	NR	NR
Wenzing (2021)	Germany	Cross-sectional	Ethnic minority youth	104 17.73 (3.2) M & F	4 items of optimism from the Developmental Resources Questionnaire for Children and Adolescents (FRKJ 8–16)	.71	NR	NR	NR
Werner (2022)	Germany	Longitudinal	Adolescents from general population	131 14.31 (1.84) M & F	Optimism subscale from the German Questionnaire to Assess Resources for Children and Adolescents (QARCA)	.62 and .93	NR	NR	NR
Wong (2022)	China	Trial	Moderate Intellectual Disability	51 8th grade M & F	CHS	NR	NR	NR	NR
Xian (2022)	China	Cross-sectional	Students	2792	CHS	Omega=.87	NR	Construct validity	The measurement model showed an acceptable data fit:

			11-24 (16.45 (2.62)) M & F						χ2/ df= 18.74, CFI = 0.97, TLI = 0.94, RMSEA = 0.08, and SRMR = 0.03
Zhou (2022)	China	Cross-sectional	Adolescent earthquake survivor	620 12-19 (15.5 (1.59)) M & F	Revised State Hope Scale	.80	NR	NR	NR
Yan (2022)	China	Cross-sectional	Students	Sample1: 845 Sample 2: 483 13-17 (15.32 (0.67)) M & F	CHS	Overall=.91 Pathway=.86 Agency=.82	NR	NR	NR
Yépez-Tito (2022)	Ecuador,	Cross-sectional	Students	659 12-18 (14.61 (1.74)) M & F	Values in Action Inventory of Strengths for Youth (VIA-Y) (hope subscale)	.60 to .79	NR	NR	NR
Yin (2021)	China	Cross-sectional	Children from low-income families	392 12.66 (1.23) M & F	CHS	T1=.79 T2=.84	NR	NR	NR
Yoonjung (2022)	South Korea	Cross-sectional	Survivors of Childhood Cancer	105 11-19 M & F	Hope Scale for the upper grade elementary school students (by Choi)	.94	NR	NR	NR
Yu, (2021)	USA	Longitudinal	Youth from the NEXT Generation Health Study	1904 14-20 (16.31 (0.5)) M & F	LOT_R	Wave 6=.74	NR	NR	NR
Yu (2021)	China	Cross-sectional	Students	1971 19.59 (1.13) M & F	Psychological Capital Questionnaire (hope and optimism subscale)	Overall=.92 Hope=.85 Optimism=.83	NR	NR	NR
Yuen (2022)	China	Cross-sectional	Regular and gifted students	540 Grade 7-12 M & F	Snyder Dispositional Hope Scale (DHS	ω = .85–.86	NR	Construct validity Measurement invariance	CFA analysis revealed a 2-factor model and an adequate fit. All factor loadings were significant and strong (λ = .62–.85, p < .01 Scalar measurement invariance across regular and gifted students. Structural invariance: Gifted students had significantly higher levels of agency (d = 0.24, p < 0.01) and pathway (d

									= 0.40, p < 0.01) than the regular students
Zeinalipour (2022)	Iran	Cross-sectional	Students	500 16-17 M & F	CHS	.79	NR	NR	NR
Zhang (2022)	China	Trial (RCT)	Patients diagnosed with cancer	50 16.38 (2.31) M & F	Herth Hope Index	Immediate posttreatment =:87 4-week follow-up=:86	NR	NR	NR
Zhao (2021)	China	Cross-sectional	Students	1190 14-18 (16.06 (0.74)) M & F	LOT	NR	NR	NR	NR
Zhao (2021)	China	Longitudinal	Students	3650 17-24 M & F	One optimism item	NR	NR	Convergent and divergent validity	Significant positive correlation with Socio-economic status and negative correlations with a measure of depression
Zhao (2021)	China	Cross-sectional	Students with and without mental health problems	200 12-17 M & F	Positive Psycap Questionnaire (PPQ (hope and optimism subscale)	Overall=.865 Subscales: .723-.896	NR	NR	NR
Zhou (2022)	China	Cross-sectional	Students	2672 13.54 (1.04) M & F	Chinese version of the Life Orientation Test-Revised (CLOT-R)	Both optimism and pessimism subscale α=.74 Both optimism and pessimism subscale McDonald's omega =.82	NR	Construct validity	CFA showed bi-dimensional structure had a good fit: χ2/df = 12.02, RMSEA = 0.06, CFI = 0.95, TLI = 0.94, SRMR = 0.0)
Zhao (2021)	China	Cross-sectional	Students	686 11-15 (12.6 (0.634)) M & F	A 7-item scale was used to assess participants' hopefulness (Whitaker, Miller, & Clark, 2000).	.768	NR	Construct validity	CFA showed the two-factor (positive future outlook and hopelessness) model had an acceptable fit to the data, χ2 /df = 2.350, GFI = 0.988, AGFI = 0.973, TLI = 0.980, CFI = 0.988, RMSEA = 0.044.
Liu (2022)	China	Cross-sectional	Children with cancer	412 8-18 (12.3 (2.91)) M & F	Chinese version of the Herth Hope Index (HHI	.78	0.82	Content validity Convergent and	Content validity index for the scale was 0.9 and items ranged from 0.8 to 1.0 Positive correlation between HHI and a scale on depression and negative correlation

								divergent validity	between HHI and a scale on quality of life
								Structural validity	EFA showed a three-factor model, explaining 82.74% of the total variance. CFA showed that /df =2.20, CFI=0.98, GFI= 0.94, and RMSEA= 0.07 Semantic equivalence. The sematic equivalence for the translated scale was 0.916, with that for the items ranging from 0.8 to 1.0
Maurer (2022)	Sweden	Cross-sectional	Students	846 16-21 (18 (.85)) M & F	Swedish version of the EPOCH measure of adolescent well-being	Overall α = .76–.88, McDonald's ω = .77 –.88 Optimism subscale α = .83, McDonald's ω = .84)	NR	Construct validity Criterion validity Measurement invariance	CFA results showed the five-factor structure was fit: $\chi2(160)$ = 818.72, p < .001; CFI = 0.917, TLI = 0.902, RMSEA = 0.070 [CI = 0.065, 0.075], SRMR = 0.044 Correlations between the five EPOCH subscales and positive and negative aspects of well-being The tool showed scalar invariance cross gender
Mendes de Oliveira (2022)	Brazil	Cross-sectional	Students	976 5–16 (10.4 (3.4)) M & F	Brazilian Version of the Youth Life Orientation Test (YLOT)	Optimism α=.61-.71 ω=.85-.88 Pessimism α=.67-.73 ω=.85-.86	NR	Construct validity Convergent validity Measurement invariance	oblique two-factor model best fits the factor structure for the YLOT was demonstrated Convergent validity established with parental reports of optimism and measures of wellbeing The scale was invariant across age (5-13 years) Tool translations and adaptations done
Metzler (2022)	South Sudan	Cross-sectional	Refugee children	1118 9-14 (11.61 (1.6)) M & F	CHS	.79		Construct validity	CFA analysis showed good fit for a one-factor model with error terms of items 1 and 3 and items 4 and 6 allowed to covary fit the data well: $\chi2$ (7) = 36.83, p<.001; RMSEA=0.087 (90% CI = 0.061 – 0.116); CFI=0.987; TLI = 0.971; WRMR=0.647.

								Convergent validity Measurement invariance	The EFA showed eigen values of 3.08, 1.03, 0.63, 0.52, 0.42, and 0.3 Positive correlations with measures of resilience Scale invariant across age and gender
Ngai (2022)	China	Cross-sectional	Non-engaged youth	1998 13-29 (18.87 (3.284)) M & F	Career and Life Development Hope (CLDH) Scale	.948	NR	Construct validity Concurrent and discriminant validity	EFA analysis showed a two-factor structure—career and life development pathways (CLDP) and career and life development agency (CLDA) accounting for 63.08% of the total variance. CFA showed good model fit (CFI = 0.934, TLI = 0.926, RMSEA = 0.060, 90% CI [0.055, 0.065], SRMR = 0.042) Correlations between the scale and other career-related and social well-being measures
Nguyen (2022)	USA	Cross-sectional	Typically developing children and diverse sample of children with chronic health	Study 1: 44 10.21 (3.25) Study 2: 38 11.14 (3.2) M & F	CHS	.72-.86	NR	NR	NR

CFA-Confirmatory factor analysis; EFA -Exploratory factor analysis; PCA-Principal component analysis, CHS Children's Hope scale; EPOCH-Engagement, Perseverance, Optimism, Connectedness, and Happiness Measure of Adolescent Wellbeing; CFI-Comparative fit index; DIF-Differential item functioning; GFI-Goodness of fit index; AGFI-Adjusted goodness of fit index; AIC-Akaike information criterion; $\chi2$-Chi-square; df-Degree of freedom; RMSEA-Root mean square of approximation; SRMR-Standardized root mean square residual; TLI-Tucker-Lewis Index; α-Cronbach's alpha; ICC-Intraclass correlation; r-Pearson correlation coefficient; KMO-Kaiser-Meyer-Olkin Measure; FGDs-Focused group discussions; NR-Not Reported; USA-United States of America; UK-United Kingdom

Appendix 3: Psychometric properties of the most frequently used measures of Optimism among adolescents

Measure used	Construct measured	Number of studies	Country (frequency)	Reliability		Validity
				Internal consistency	**Test-retest reliability**	
Life Orientation Test (LOT/ LOT-R)	Dispositional optimism	186	USA (102) China (12) Spain (10) UK (8) Italy (6) Israel (4) India (5) Australia (5) Norway (4) Turkey (5) Singapore (3) Canada (4) Netherlands (4) Germany (2) Hungary (2) Poland (3) Brazil (4) Pakistan (3) Sweden (3) Ireland (1) Greece (2) Japan (2) Serbia (2) Czech Republic (2)	-Reliability reported in 160 studies (141 studies reported Cronbach's alpha (range = .48 – .91); two studies reported McDonald's Omega (.55 – .76); one study reported reliability coefficient H (.60 & .72 for subscales)) -95 (67.4%) studies reported Cronbach's alpha > .70	-Reported in seven studies (range = .51 – .86)	-Reported in 21 studies -The types of validity assessed include measurement invariance across disability groups (one study), construct (16 studies), convergent (five studies), divergent (one study), discriminant (one study), predictive (one study), criterion (two studies), and concurrent validity (one study) -*This tool was used across 27 different cultural contexts and across these different contexts it majorly retained its good psychometric properties.*

			Egypt (1) South Korea (1) Portugal (1)			
Youth Life Orientation Test (YLOT)	Dispositional optimism	23	USA (8) Spain (3) Australia (1) South Korean (1) Canada (1) UK (1) Israel (1) Netherlands (1) Palestine (1)	-Cronbach's alpha reported in 19 studies (range = .62 – .90) -14 (93.3%) studies reported Cronbach's alpha ≥ .70	-Reported in one study (.65 – .75)	-Reported in four studies -The types of validity assessed include measurement invariance across age groups (one study) and groups with and without cancer (one study), construct (four studies), convergent (two studies), discriminant (one study), and predictive validity (one study) -*The tool was used across nine different cultural contexts and across these different contexts it retained its good psychometric properties*
Engagement, Perseverance, Optimism, Connectedness, and Happiness (EPOCH) Measure of Adolescent Wellbeing	Measures 5 psychological domains including Engagement, Perseverance, Optimism, Connectedness, and Happiness.	19	USA (3) Iran (3) Australia (3) China (2) Italy (1) Slovakia (1)	-Reliability reported in 15 studies (six studies reported Cronbach's alpha (range = .65 – .86); one study reported McDonald's omega (.77 – .94)) -Five (83.3%) studies reported Cronbach's alpha > .70	-Reported in three studies (range = .12 – .85)	-Reported in nine studies -The types of validity assessed include measurement invariance across age (1 study) gender (4 studies), schools (2), or location (two studies), construct (four studies), face (one study), content (one study), convergent (four studies), criterion (1 study) discriminant (one study), and divergent validity (one study) -*One study established its configural (RMSEA = 0.042, CFI = 0.96, $\chi 2$ = 2983.5, df = 480) and weak (RMSEA = 0.045, CFI = 0.95,*

						χ2 = 3476.0, df = 510) measurement invariance across countries. Another study by Buerger demonstrated configural, metric and scalar invariance across age and gender. -This tool was used across six different cultural contexts and across these different contexts it retained its good psychometric properties
Positivity Scale	A measure of assessing positivity and includes items related to self-esteem, life satisfaction, and optimism.	11	Turkey (3) Colombia (1) China (1) UK (1) Spain (1)	-Cronbach's alpha reported in all the 11 studies (range = .75 – .91)	NR	-Reported in two studies - The type of validity assessed include measurement invariance across age and school level (two studies), construct (two studies), convergent (one study), and concurrent validity (one study - This tool was used across five different cultural contexts and across these different contexts it retained its good psychometric properties
Children's Attributional Style Questionnaire	Assesses both positive and negative attributions about hypothetical events	6	USA (2) Spain (1) South Korea (1) Iran (1) India (1)	-Cronbach's alpha reported in only two studies (range = .51 – .79) -Both studies reported Cronbach's alpha < .70 for some subscales	NR	-NR -This tool was used across five different cultural contexts
Resiliency Inventory	The scale has two items on optimism and other	5	Canada (4) Australia (1)	-Cronbach's alpha reported in all the five	NR	-NR -This tool was used only in two different cultural contexts and

				studies (range = .69 – .79) -Four (80.0%) studies reported Cronbach's alpha ≥ .70		*across these different contexts, it retained good reliability*
The Resiliency Scale for Children and Adolescents	The overall measure includes a sense of mastery scale (optimism about life and one's competence, self-efficacy, and ability to learn from mistakes)	4	Australia (2) USA (1) UK (1)	-Cronbach's alpha reported in three studies (range = .69 – .91) -Two (66.7%) studies reported Cronbach's alpha ≥ 0.70	-Reported in one study (.68)	-NR *This tool was used across three different cultural contexts and across these different contexts, it retained good reliability*
Peer Life Orientation Test (PLOT/PLOT-R)	Dispositional optimism	4	USA (4)	-Cronbach's alpha reported in all the four studies (range = .71 – .86)	-Reported in one study (.43 – .54)	-Reported in only one study -Construct validity the only type of validity reported in this study - *This tool was used only in one cultural context*
Extended Life Orientation Test (ELOT)	Dispositional optimism	3	USA (1) UK (1) Australia (1)	-Cronbach's alpha reported in all the three studies (range = .71 – .92)	-Reported in one study (.73 and .84 for the subscales)	-NR *This tool was used across three different cultural contexts and across these different contexts, it retained good reliability*
The Reasons for Living Inventory for Adolescents (RFL-A)	Future optimism The tool also measures other constructs: Suicide-Related Concerns, Family Alliance,	3	Malaysia (2) USA (1)	-Cronbach's alpha reported in all the three studies (range = .92 – r.97)	-NR	-Reported in two studies -Construct (one study), convergent (one study), discriminant (one study), and concurrent validity (one study) were assessed in these studies

	Peer Acceptance and Support, and Self-Acceptance					-- *This tool was used across two different cultural contexts and across these different contexts, it retained its good psychometric properties*
The Optimism and Pessimism Scale	Dispositional optimism	3	USA (1) Slovakia (1) Serbia (1)	-Cronbach's alpha reported in two studies (.55 and .81)	NR	-NR - *This tool was used across three different cultural contexts*
Generalized Expectancy for Success Scale (GESS)	Aspects of generalized expectancy: general efficacy, long-range career-oriented expectancy, and personal problem solving	3	USA (1) Sweden (1) Japan (1)	-Cronbach's alpha reported in all the three studies (range = .65 – .90) -Two (66.7%) studies reported Cronbach's alpha ≥ .70	NR	-Reported in only one study -Construct and concurrent validity were assessed. -*This tool was used across three different cultural contexts and across these different contexts it retained its good psychometric properties*
Social and Emotional Health Survey – Primary (SEHS-P)	A multidimensional tool assessing well-being constructs such as gratitude, optimism, zest, and persistence	3	Japan China Turkey	Reported in all 3 (.73-.97)	NR	Reported in all 3 Construct validity 3, measurement invariance across gender 1, concurrent validity 1
Connor-Davidson Resilience Scale	A multidimensional scale assessing various aspects of resilience. including hardiness, coping, adaptability flexibility, optimism, regulation of emotion and	3	Turkey (2) Iran	Reported in 1 (.94)	NR	NR

	cognition, and self-efficacy				

CFI-Comparative fit index; TLI-Tucker Lewis Index; X²-Chi-square; df-Degree of freedom; RMSEA-Root mean square of approximation; USA-United States of America; UK-United Kingdom; NR-Not reported

Appendix 4: Psychometric properties of the most frequently used measures of Hope among adolescents

Measure used	Construct measured	Number of studies	Country (frequency)	Reliability			Validity
				Internal consistency	**Test-retest**	**Interrater reliability**	
Children's Hope Scale (CHS)	Agency and pathway	192	USA (80) China (16) Australia (8) Israel (13) South Africa (10) Turkey (9) Portugal (3) Spain (2) Serbia (3) Canada (3) Kenya (2) Palestine (2 Singapore (1) UK (1) Lebanon (1) Sri Lanka (1) Uganda (1) Mexico (1) Iran (1) Croatia (1) Nepal (1)	-Reliability reported in 161 studies (134 studies reported Cronbach's alpha (range = .55 – .95); one study reported McDonald's Omega (.87)) -121 (90.3%) studies reported Cronbach's alpha > .70	- Reported in six studies (range = .47 – .80)	NR	-Reported in 35 studies -The types of validity assessed include construct (25 studies), divergent (1 study), convergent (11 studies), discriminant (two studies), measurement invariance across immigrant status, time points, sex, socioeconomic status, disability groups, gender, or region (11 studies), incremental (two studies), content (three studies), criterion (one study), and predictive validity (two studies)

| | | | Nigeria (1) Tanzania (1) Rwanda (1) Haiti (1) Zambia (1) DRC (1) Greece (1) Malaysia (1) Switzerland (1) | | | | *- One study established Multigroup scalar invariance across language groups (English vs Afrikaans): x2 = 62.990, df = 19, p = 0.000, CFI = 0.975, RMSEA = 0.048, SRMR = 0.029* *- One study established configural invariance for the one-factor (χ2 (df) =139.217 (18), P=0.000, CFI=0.976, TLI=0.960, 0.0322, RMSEA=0.055) and two-factor (χ2 (df) =126.330 (16), P=0.000, CFI=0.978, TLI=0.959, 0.0329, RMSEA=0.056), as well as metric invariance for the one-factor (χ2 (df) =166.880 (23), P=0.000, CFI=0.972, TLI=0.963, 0.0374, RMSEA=0.053) and two-factor (χ2 (df) =151.445 (20), P=0.000, CFI=0.974, TLI=0.961, 0.0378, RMSEA=0.054 across* |

							cultures. This study also demonstrated partial scalar invariance for the one-factor model (change in CFI of 0.007 and change in RMSEA of 0.002) *-This tool was used across 30 different cultural contexts and across these different contexts, it mostly retained its good psychometric properties*
Synder's Hope Scale	Agency and pathway	55	USA (22) China (6) Iran (5) Italy (5) Australia (2) Brazil (2) Israel (2) Turkey (2) Philippines (1) Switzerland (1)	-Cronbach's alpha reported in 44 studies (range = .53 – .90) -26 (68.4%) studies reported Cronbach's alpha > .70	- Reported in two studies (.65 & .60)	-Reported in one study (0.60 – 0.95)	-Reported in 12 studies -The type of validity assessed include longitudinal measurement invariance (one study), gender MI (1 study), student groups M1 (1 study), construct (10studies), predictive (one study), criterion (one study), content (one study), and convergent validity (two studies) *-This tool was used across 10 different*

							cultural contexts and across these different contexts, it mostly retained its good psychometric properties
Herth Hope Index	Temporality and future, positive readiness and expectancy, and interconnectedness.	13	USA (4) South Korea (1) Pakistan (1) Peru (1) Spain (1) Brazil (1) Australia (1)	-Cronbach's alpha reported in 10 studies (range = 0.65 – 0.92) -Seven (87.5%) studies reported Cronbach's alpha > .70	- Reported in 3 studies (.57 & .74)	NR	-Reported in three studies -The types of validity assessed include construct (three studies), and convergent validity (two study), content (1), discriminant (1) *-This tool was used across seven different cultural contexts and across these different contexts, it mostly retained its good psychometric properties*
Hopefulness Scale for Adolescents (HAS)	Degree of positive future orientation at the time of measurement	10	USA (9) Nepal (1)	-Cronbach's alpha reported in nine studies (range = .70 – .93)	NR	NR	NR *- This tool was used only in two different cultural contexts*
State Hope Scale	Agency and pathway	11	USA (5) Sweden (1) France (1) China (2)	-Cronbach's alpha reported in all the 11 studies (range = .66 – .92)	NR	NR	-Reported in two studies -The types of validity assessed include measurement

				-8 (88.9%) studies reported Cronbach's alpha > .70			invariance across age and gender (one study), construct (two studies), content (one study), and predicative validity (one study) -*This tool was used across four different cultural contexts and across these different contexts, it mostly retained its good psychometric properties*
Trait Hope Scale	Agency and pathway	10	USA (6) China (1) UK (1)	-Cronbach's alpha reported in all the 10 studies (range = .64 – .90) -Six (75.0%) studies reported Cronbach's alpha ≥ .70	NR	NR	Construct (1 study)
Values in Action Inventory of Strengths for Youth (VIA-Youth)	Assess 24-character strengths including hope	12	USA (2) Germany (2) Switzerland (2) Spain (1) India (1)	-Cronbach's alpha reported in 10 studies (range = .66 – .91) -Six (85.7%) studies reported Cronbach's alpha ≥ .70	- Reported in two studies (0.55 & 0.71 for the hope subscale)	NR	-Reported in three studies -The types of validity assessed include construct (three studies), and convergent validity (two studies) -*This tool was used across five different*

							cultural contexts and across these different contexts, it mostly retained its good psychometric properties
Staats's Hope Index	Wishes and expectations, and assesses the cognitive component of hope	7	Israel (5) Brazil (2)	-Cronbach's alpha reported in all the seven studies (.81 – .98)	NR	NR	-Reported in only one study -Construct and convergent validity the only validity types reported in this study -*This tool was used across two different cultural contexts*
Beck Hopelessness Scale (BHS)	The tool assesses hopelessness, a low score on hopelessness inferred to high hope	8	China (3) Turkey (2) USA (2)	-reliability (4) Cronbach's alpha reported in three studies (range = .69 – .90); omega in one study (.58) -Two (66.7%) studies reported Cronbach's alpha ≥ .70	NR	NR	NR - *This tool was used across three different cultural contexts*
Hopefulness about Future Scale	Positive outlook	3	China (3)	-Cronbach's alpha reported in all the three studies (range = .73 – .78)	NR	NR	NR -*This tool was used only in one cultural context*

Hopelessness Scale for children	Future expectations and giving up (hopelessness)	3	USA (3)	Alpha reported in all 3 (.62-.74)	NR	NR	Reported in one (construct and convergent)
Work Hope Scale	Agency, goals and pathway	3	USA (2) Italy (1)	Alpha reported in all 3 (.65-.88)	NR	NR	NR

CFI-Comparative fit index; TLI-Tucker Lewis Index; X^2 -Chi-square; df-Degree of freedom; RMSEA-Root mean square of approximation; SRMR-Standardized Root Mean Squared Residual; USA-United States of America; UK-United Kingdom; NR-Not reported

Appendix 5: Measures of Hope, Optimism, and related constructs of positive future orientation among adolescents

Measure
Children's Hope Scale (CHS)
Life Orientation Test (LOT)
Snyder's Hope Scale
Youth Life Orientation Test (YLOT)
State Hope Scale
Herth Hope Index (HHI)
Children's Future Expectation Scale
Engagement, Perseverance, Optimism, Connectedness, and Happiness (EPOCH) Measure of Adolescent Wellbeing
Hopefulness Scale for Adolescents
Hopefulness about Future Scale (HFS)
Trait Hope Scale
Values in Action Inventory of Strengths for Youth (VIA-Youth)
Staats's Hope Index
Beck Hopelessness Scale (BHS)
Positivity Scale (PS)
School Success Profile -Future Optimism Scale
Resiliency Inventory – Optimism subscale
Children's Attributional Style Questionnaire (CASQ)
Visions about Future Scale (VFS)
Generalized Expectancy for Success Scale (GESS)
Hind's Hopefulness Scale for Adolescents
The Resiliency Scale for Children and Adolescents
Extended Life Orientation Test (ELOT)
Peer Life Orientation Test (PLOT)
The Reasons for Living Inventory for Adolescents (RFL-A)
Zombardo Time Perspective Inventory – future subscale
The Optimism and Pessimism scale
Adolescent Time Attitude Scale (ATAS)
Miller Hope Scale
Hopelessness Scale for Children
The Optimism Scale (OS)
Adolescent Climate Change Hope Scale
Hopeful Future Expectations Scale
Anila Positive Psychological Capital Scale (APS)
Locus-of-Hope Scale
3-item Hope Measure by Lippman et al., 2014
The Doucette and Bickman's Hopefulness Scale – Youth Version
Future Optimism Scale
Optimism Scale
Future Orientation Scale

Personal Optimism Scale
Work Hope Scale
Positive Schema Questionnaire (PSQ)
Optimism Scale for Students (OSS)
Children's Optimistic and Pessimistic Expectations of Relationships Scale (COPER
Future Expectations Scale for Adolescents (FESA)
Adolescent Time Inventory (ATI)
7-item scale from the Add Health
Revised Jalowiec Coping Scale
New 12-item Scale measuring Optimistic Thinking Style
The Hunter Opinions and Personal Expectations Scale (HOPES-20) -Hopefulness Subscale
New 12-item hope scale
Career-related Planned Happentance Skills Scale (CPHS) - Optimism Subscale
Academic Hope Scale
Time Attitude Scale (TAS)
Optimism Questionnaire
16-item Positive Thinking Scale
New 5-item Hopefulness Scale
New 4-item Optimism Scale
Intentional Self-regulation Questionnaire
Adapted version of the Perceptions of Chances for Success Measure
Urban Adolescent Hope Scale (UAHS)
Academic Psychological Capital Questionnaire
The General Measure of Optimism-Pessimism
Emotional Quotient Inventory – General Mood Subscale
Inventory of Adolescent Resilience - Hope and Optimism Subscale
Perceived Life Chances Scale
Attributional Style Questionnaire
Multidimensional Measure of Children's Perception of Control (MM-CPC)
Attitude to the Future Scale
Character Growth Index
Career Commitment Measure (CCM)
Wyman Future Expectations Scale
12-item Future Orientation Scale developed from items adapted from the LOT-R and the Future Time Perspective Inventory
The Achievability of Future Goals Scale
The Short Test Hope Scale (STHS)
Adolescent Domain-Specific Hope Scale (ADSHS)
Positive Experiences at School Scale (PEASS)
Child/Adolescent Measurement System - Hopefulness Subscale
My Hope Scale
What will Happen to Me Scale
Resilience Measurement Scale
20 items adapted from the Aspiration Ladder
The Arabic Scale of Optimism/ Pessimism

The Expectations/ Aspirations Measure
Cross-Cultural Personality Assessment Inventory (CPAI-A) - Optimism versus Pessimism (O-P) scale
Tedium Measure
Cognitive Triad Inventory for Children
You and Health Scale
Youth Inventory Instrument - Optimistic Future View Subscale
Inventory of Health-related Optimistic Beliefs
Youth Engagement and Action for Health! (YEAH!) Questionnaire - Optimism for Change subscale
Aspiration index
Children's Beliefs about Parental Divorce Scale –Hope of Reunification Subscale
Self-Efficacy, Optimism, and Pessimism -Short Version (SWOP-K9)
Persistent Academic Possible Selves Scale for Adolescents (PAPSS)
Climate Change Hope Scale (CCHS)
Revised Orientation-Attribution Questionnaire
The Managing Emotions and Resiliency Scale (MEARS)
The Future Time Perspective Inventory (FTP)
Optimism-Pessimism Scale of the Minnesota Multiphasic Personality Inventory (MMPA-PSM)
Holistic Student Assessment
The Comprehensive Child and Adolescent Hope Scale
The Future Orientation Interview based on the Future Orientation Questionnaire
"Things I can Do If I Try" Questionnaire
Positive and Negative Suicidal Ideation Scale (PANSI)
Adolescent Time Inventory - Time Attitude (ATI-TA)
3 items from the Expectations about Employment, Education, and Life Span section from the Adolescent Health Survey
Scale of Experiential Time Perspective
Future Time Perspective Scale (FTP)
4-item Optimism Subscale from the Mental Health Measure from the US longitudinal survey of youth
Adolescents' Optimism Scale
Inventory of Strengths - Hope/Optimism Subscale
Social and Emotional Health Survey - Secondary (SEHS-S)
Social and Emotional Health Survey - Primary (SEHS-P)
Adolescent Coping Orientation for Problem Experiences (A-COPE)
6-item scale adapted from a previous study
Hope Scale by Al-mabuk, Enright and Cardis, 1995
10-item Optimism Scale from a previous study
Positive Global Expectancy Measure
The Flourishing Scale
Hope/Optimism Scale
Optimism Scale from the International Personality Item Pool (IPIP)
Achievement Emotions Questionnaire

The Trait Emotional Intelligence Questionnaire (TEIQue)
Respiratory Illness Opinion Survey –Optimism Subscale
Achievement-Motive Grid
Gottschalk's Hope Scale
The Hopes and Fear Questionnaire
Skala Optimismus-Pessimismus-2 (SOP2)
Hope Interview
Spiritual Wellness Inventory
Future Perspective Questionnaire
Peace Attitudes Scale
New 3-item Optimism Scale
Life Perspectives Inventory
Expectations for Future Scale
Children's Future Orientation Scale
EQ-I:YV -General Mood Scale
26-item Future Expectations Scale based on The Future Expectations Scale for Adolescents and My Future Questionnaire
Environmental Literacy Instrument for Adolescents (ELI-A)
Ladder of Life Instrument
Time Perspective Scale for Early Adolescents
Youth Ecological Resilience Scale (YERS)
Ultrecht Coping List for Adolescents (UCL-A)
Vocational Hope Scale
Hope Scale for Children
Coping Behavior Inventory
Integrative Hope Scale (HIS)
Questionnaire of Environmental Concern - Environmental optimism subscale
Adolescent Well-Being Scale (AWBS)
The Therapeutic Factors Inventory -Short Form (TFI-S) - Instillation of Hope subscale
Ways of Coping Inventory - Optimistic Approach Subscale
Hope for Success Questionnaire
Optimism and Pessimism Measure – Short (OPM-S)
Optimism and Pessimism Questionnaire (OPQ)
Conor-Davidson Resilience Scale
Educational Hope Scale for Adolescents
My HERO Scale
New 12-item Hope Scale
Total Hope Scale
Middle Years Development Instrument (MDI)
Future Emotions Questions Scale
Optimistic Personality Scale
Monitoring the Future Survey
The Child Wellbeing Assessment
Devereux Student Strength Assessment
Developmental Resources Questionnaire for Children and Adolescents

German Questionnaire to Assess Resources for Children and Adolescents (QARCA)
Hope Scale for Upper Grade Elementary Students
Career and Life Development Hope Scale
Adolescent and Adult Time Inventory – Time Attitudes Scales (AATI-TA)
Perceptions of Opportunities Scale
Optimism Resiliency Inventory
12-item Scale
Future Outlook Inventory
Hope in Counselling Services Scale
Schutte Self-Report Inventory (SSRI)

Appendix 6: Measures of Optimism among adolescents and their frequency of use

Measure	Frequency
Life Orientation Test (LOT)	187
Youth Life Orientation Test (YLOT)	23
Engagement, Perseverance, Optimism, Connectedness, and Happiness (EPOCH) Measure of Adolescent Wellbeing	19
Positivity Scale	11
Children's Attributional Style Questionnaire (CASQ)	6
Resiliency Inventory	5
The Resiliency Scale for Children and Adolescents	4
Peer Life Orientation Test (PLOT)	4
Generalized Expectancy for Success Scale (GESS)	3
Extended Life Orientation Test (ELOT)	3
The Reasons for Living Inventory for Adolescents (RFL-A)	3
The Optimism and Pessimism Scale	3
Connor-Davidson Resilience Scale	3
School Success Profile	2
Personal Optimism Scale	2
Positive Schema Questionnaire (PSQ)	2
Optimism Scale for Students (OSS)	2
Children's Optimistic and Pessimistic Expectations of Relationships Scale (COPER)	2
Future Expectations Scale for Adolescents (FESA)	2
Developmental Resources Questionnaire for Children and Adolescents	2
Revised Jalowiec Coping Scale	2
The Optimism Scale	1
Optimism Scale (OS)	1
Future Optimism Scale	1
7-item scale from the Add Health	1
New 12-item Scale measuring Optimistic Thinking Style	1
Career-related Planned Happentance Skills Scale (CPHS) - Optimism Subscale	1
Time Attitudes Scale	1
Optimism Questionnaire	1
New 4-item Optimism Scale	1
The General Measure of Optimism-Pessimism	1
Emotional Quotient Inventory – General Mood Subscale	1
Perceived Life Chances Scale	1
Attributional Style Questionnaire	1
Multidimensional Measure of Children's Perception of Control (MM-CPC)	1
Attitude to the Future Scale	1
Character Growth Index	1
The Achievability of Future Goals Scale	1
Positive Experiences at School Scale (PEASS)	1
What will Happen to Me Scale	1

Resilience Measurement Scale	1
20 items adapted from the Aspiration Ladder	1
The Arabic Scale of Optimism/ Pessimism	1
Cross-Cultural Personality Assessment Inventory (CPAI-A) - Optimism versus Pessimism (O-P) scale	1
Tedium Measure	1
You and Health Scale	1
Youth Inventory Instrument - Optimistic Future View Subscale	1
Inventory of Health-related Optimistic Beliefs	1
Youth Engagement and Action for Health! (YEAH!) Questionnaire - Optimism for Change subscale	1
Self-Efficacy, Optimism, and Pessimism -Short Version (SWOP-K9)	1
The Managing Emotions and Resiliency Scale (MEARS)	1
Optimism-Pessimism Scale of the Minnesota Multiphasic Personality Inventory (MMPA-PSM)	1
Holistic Student Assessment	1
The Future Orientation Interview based on the Future Orientation Questionnaire	1
Positive and Negative Suicidal Ideation Scale (PANSI)	1
4-item Optimism Subscale from the Mental Health Measure from the US longitudinal survey of youth	1
Adolescent Optimism Scale	1
Social and Emotional Health Survey - Secondary (SEHS-S)	1
Social and Emotional Health Survey - Primary (SEHS-P)	1
Adolescent Coping Orientation for Problem Experiences (A-COPE)	1
6-item scale adapted from a previous study	1
10-item Optimism Scale from a previous study	1
Positive Global Expectancy Measure	1
The Flourishing Scale	1
Optimism Scale from the International Personality Item Pool (IPIP)	1
The Trait Emotional Intelligence Questionnaire (TEIQue)	1
Respiratory Illness Opinion Survey –Optimism Subscale	1
Skala Optimismus-Pessimismus-2 (SOP2)	1
New 3-item Optimism Scale	1
Life Perspectives Inventory	1
Expectations for Future Scale	1
Youth Ecological Resilience Scale (YERS)	1
Ultrecht Coping List for Adolescents (UCL-A)	1
Coping Behavior Inventory	1
Questionnaire of Environmental Concern - Environmental optimism subscale	1
Ways of Coping Inventory - Optimistic Approach Subscale	1
Optimism and Pessimism Measure – Short (OPM-S)	1
Optimism and Pessimism Questionnaire (OPQ)	1
Middle Years Development Instrument (MDI)	1
Future Emotions Questions Scale	1
Optimistic Personality Scale	1

The Child Wellbeing Assessment	1
Devereux Student Strength Assessment	1
German Questionnaire to Assess Resources for Children and Adolescents (QARCA)	1
Optimism Resiliency Inventory	1
Schuttle Self-Report Inventory	1

Appendix 7: Measures of Hope among adolescents and their frequency of use

Measure	Frequency
Children's Hope Scale (CHS)	193
Snyder's Hope Scale	55
Herth Hope Index (HHI)	13
Hopefulness Scale for Adolescents	13
State Hope Scale	11
Trait Hope Scale	10
Values in Action Inventory of Strengths for Youth (VIA-Youth)	12
Staats's Hope Index	7
Beck Hopelessness Scale (BHS)	8
Hopefulness about Future Scale	3
Hopelessness Scale for Children	3
Hopeful Future Expectations Scale	2
Hind's Hopefulness Scale for Adolescents	2
Miller Hope Scale	2
Adolescent Climate Change Hope Scale	2
Locus-of-Hope Scale	2
3-item Hope Measure by Lippman et al., 2014	2
The Doucette and Bickman's Hopefulness Scale – Youth Version	2
Work Hope Scale	3
The Hunter Opinions and Personal Expectations Scale (HOPES-20) - Hopefulness Subscale	2
New 12-item hope scale	1
Academic Hope Scale	2
New 5-item Hopefulness Scale	1
Intentional Self-regulation Questionnaire	1
Adapted version of the Perceptions of Chances for Success Measure	1
Urban Adolescent Hope Scale (UAHS)	1
Career Commitment Measure (CCM)	1
The Short Test Hope Scale (STHS)	1
Adolescent Domain-Specific Hope Scale (ADSHS)	1
Child/Adolescent Measurement System - Hopefulness Subscale	1
My Hope Scale	1
Children's Beliefs about Parental Divorce Scale –Hope of Reunification Subscale	1
Climate Change Hope Scale (CCHS)	2
The Comprehensive Child and Adolescent Hope Scale	1
"Things I can Do If I Try" Questionnaire	1
Scale of Experiential Time Perspective	1
Inventory of Strengths - Hope/Optimism Subscale	1
Hope Scale by Al-mabuk, Enright and Cardis, 1995	1
Hope/Optimism Scale	1
Achievement Emotions Questionnaire	2
Achievement-Motive Grid	1

Gottschalk's Hope Scale	1
The Hopes and Fear Questionnaire	1
Hope Interview	1
Spiritual Wellness Inventory	1
Peace Attitudes Scale	1
EQ-I:YV -General Mood Scale	1
Environmental Literacy Instrument for Adolescents (ELI-A)	1
Ladder of Life Instrument	1
Time Perspective Scale for Early Adolescents	1
Vocational Hope Scale	1
Hope Scale for Children	1
Integrative Hope Scale (HIS)	1
Adolescent Well-Being Scale (AWBS)	1
The Therapeutic Factors Inventory -Short Form (TFI-S) - Instillation of Hope subscale	1
Hope for Success Questionnaire	2
Educational Hope Scale for Adolescents	1
New 12-item Hope Scale	1
Total Hope Scale	1
New 12-item Hope Scale	1
Monitoring the Future Survey	1
Hope Scale for Upper Grade Elementary Students	1
Career and Life Development Hope Scale	1
Hope in Counselling Services Scale	1
Visions about Future Scale	1