



UvA-DARE (Digital Academic Repository)

Children's domain-specific self-evaluations and global self-worth: A preregistered cross-cultural meta-analysis

Tang, Y.; Brummelman, E.; Novin, S.; Assink, M.; Thomaes, S.

DOI

[10.1177/01650254231190926](https://doi.org/10.1177/01650254231190926)

Publication date

2023

Document Version

Final published version

Published in

International Journal of Behavioral Development

License

CC BY

[Link to publication](#)

Citation for published version (APA):

Tang, Y., Brummelman, E., Novin, S., Assink, M., & Thomaes, S. (2023). Children's domain-specific self-evaluations and global self-worth: A preregistered cross-cultural meta-analysis. *International Journal of Behavioral Development*, 47(6), 521-539. <https://doi.org/10.1177/01650254231190926>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (<https://dare.uva.nl>)

Children's domain-specific self-evaluations and global self-worth: A preregistered cross-cultural meta-analysis

International Journal of
Behavioral Development
2023, Vol. 47(6) 521–539
© The Author(s) 2023



Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/01650254231190926
journals.sagepub.com/home/ijbd



Yixin Tang¹ , Eddie Brummelman^{2*} , Sheida Novin^{1*} ,
Mark Assink² and Sander Thomaes¹

Abstract

Which domain-specific self-evaluations are most central to children's global self-worth? And does this differ between countries with different levels of collectivism–individualism? We conducted a preregistered cross-cultural meta-analysis to address these questions. We included 141 independent samples (21 countries/regions, 584 cross-sectional effect sizes), totaling 33,120 participants in middle to late childhood, a critical age for self-worth development. Overall, global self-worth was most strongly correlated with self-evaluations in the domain of physical appearance ($r = .64$), followed by behavioral conduct, peer relations, academic competence, athletic competence, and parent relations ($r_s = .39$ to $.54$). Global self-worth was equally strongly correlated with agentic and communal self-evaluations ($r = .51$ and $.52$, respectively). The strength of these associations did not vary significantly by country-level collectivism–individualism. These findings reveal the robust correlates of self-worth across cultures and raise important new questions about when and how culture shapes the development of children's global self-worth.

Keywords

Self-worth, childhood, collectivism–individualism, meta-analysis

What do you like about yourself? When asked this question, an 8 year-old may provide many possible answers, often including self-evaluations in specific domains, such as athletic competence (e.g., “I’m good at sports”), social relationships (e.g., “I have many friends”), and physical appearance (e.g., “I like the way I look”). From middle childhood, children readily incorporate domain-specific self-evaluations into their global self-worth (e.g., “I’m happy with myself”; Harter, 2012). Despite the large body of research in this area, meta-analytic evidence on the correlations between children's domain-specific self-evaluations and global self-worth is lacking. This should be investigated across cultures, because cultural differences in ideals, norms, and practices may determine which domains are most central to children's self-worth (Nelson, 2003). Here, we report a preregistered cross-cultural meta-analysis to address two critical questions: Which domain-specific self-evaluations are most central to children's global self-worth? And does this differ across countries with different levels of collectivism–individualism?

Domain-Specific Self-Evaluations and Global Self-Worth

The constellation of views that children have of themselves has long been characterized as a multidimensional hierarchy with domain-specific self-evaluations at its base and global self-worth at its apex (Harter, 2012; Marsh, 1990; Marsh & Shavelson, 1985; Shavelson et al., 1976). A meta-analysis that synthesized

longitudinal evidence found reciprocal relations between global self-worth and domain-specific self-evaluations over time (Dapp et al., 2023), suggesting that domain-specific self-evaluations influence global self-worth (bottom-up effects) and vice versa (top-down effects). In the current meta-analysis, we focused on cross-sectional evidence to examine how domain-specific self-evaluations and global self-worth are correlated in middle to late childhood, the time when children's self-worth first emerges. In early childhood, from around age 4 years, children have the cognitive capacities to make judgments about their competencies in specific domains, which are referred to as domain-specific self-evaluations (Harter, 2012). Children also start to construct a sense of global self-worth based on their successes or failures, but they do so only under specific circumstances (e.g., when they believe they are being evaluated by an adult; Cimpian et al., 2017). In middle childhood, from around age 8 years, children

¹Department of Developmental Psychology, Utrecht University, The Netherlands

²Research Institute of Child Development and Education, University of Amsterdam, The Netherlands

*These authors contributed equally to this article.

Corresponding author:

Yixin Tang, Developmental Psychology, Utrecht University,
Heidelberglaan 1, 3584 CS Utrecht, The Netherlands.
Email: y.tang@uu.nl

Table 1. Children's Domain-Specific Self-Evaluations and Their Operationalization.

Domain	Content and synonyms	Subscales of the Harter measures	Subscales of the Marsh measure
Academic competence	Academic abilities, scholastic competence, intellectual abilities	PCSC: Cognitive Competence SPPC: Scholastic Competence	SDQ-I: General School
Athletic competence	Athletic abilities, sports competence	PCSC: Physical Competence SPPC: Athletic Competence	SDQ-I: Physical Abilities
Behavioral conduct	Morality, honesty	PCSC: — SPPC: Behavioral Conduct	SDQ-I: —
Parent relations	Family relations, family acceptance, parent acceptance	PCSC: — SPPC: —	SDQ-I: Parent Relations
Peer relations	Peer acceptance, social acceptance, social competence, sociability, popularity	PCSC: Peer Acceptance SPPC: Social Competence	SDQ-I: Peer Relations
Physical appearance	Physical appearance, physical attractiveness, body satisfaction, body esteem	PCSC: — SPPC: Physical Appearance	SDQ-I: Physical Appearance

Note. PCSC=Perceived Competence Scale for Children, which is the predecessor of SPPC; SPPC=Self-Perception Profile for Children; SDQ-I=Self-Description Questionnaire I.

Table adapted from Dapp et al. (2023; Table 1) and Orth et al. (2021; Table 1).

can reliably incorporate domain-specific self-evaluations into their global self-worth (e.g., Butler, 2005; Dweck, 1998; Harter, 2012; Marsh et al., 2002). Knowledge about how domain-specific self-evaluations are associated with global self-worth may provide crucial insight into the emergence and development of global self-worth.

Consistent with meta-analyses on longitudinal data (Dapp et al., 2023; Orth et al., 2021), we choose to focus on several critical domains of children's self-evaluation. These domains of children's self-evaluation include (a) academic competence; (b) athletic competence; (c) behavioral conduct; (d) parent relations; (e) peer relations; and (f) physical appearance. These domains figure prominently in theories of the self (Bracken et al., 2000; Coopersmith, 1984; Shavelson et al., 1976), and are reflected in key measures of children's self-views (see Table 1), most notably the Self-Perception Profile for Children (Harter, 2012) and Self-Description Questionnaire-I (Marsh, 1990). While the Self-Description Questionnaire-I (Marsh, 1990) distinguishes mathematics and verbal self-evaluations as separate domains, influential hierarchical models (Shavelson et al., 1976) consider them as subdomains of academic self-evaluation. Accordingly, mathematics and verbal self-evaluations are conceptually further from global self-worth, compared to general academic self-evaluation. We focused on the broader construct of academic self-evaluation rather than its specific components.

Which domains are most important for children's self-worth? Several theories suggest that self-evaluations in *agentic domains*—those reflecting the degree to which children are personally effective, competent, or superior (Bakan, 1966; F. Chen et al., 2017; Judd et al., 2005)—are important. For example, theorists have argued that children need to experience personal efficacy and confidence to develop self-worth (Brummelman & Sedikides, 2020; Dweck, 2017; Muenks et al., 2018). Consequently, children may lose self-worth when they fail to feel competent in valued domains (e.g., in school; Covington, 2009). Yet, children build their self-worth not only on agentic domains, but also on *communal domains*—those reflecting the degree to which children experience relatedness, warmth, or support from others (Bakan, 1966; F. Chen et al., 2017; Judd et al., 2005). Influential theories hold that the perceived quality of one's social relationships is a major source of

self-worth. For example, the attachment theory proposes that when children perceive significant others to be available and accepting, they come to see themselves as worthy individuals (Bowlby, 1969; Sroufe, 2002). The sociometer theory extends this perspective and argues that self-worth is an evolutionary adaptation that serves to monitor the quality of one's social relationships (Leary & Baumeister, 2000). Taken together, agency and communion have consistently appeared as core determinants of how individuals value themselves (Crocker & Wolfe, 2001; Marsh & Shavelson, 1985; Tafarodi & Swann, 1995). Accordingly, the self-determination theory (Ryan & Deci, 2000) holds that individuals' self-worth arises from both the fulfillment of agentic needs (i.e., the needs for competence and autonomy) and communal needs (i.e., the need for relatedness).

Empirical evidence supports the view that both agentic and communal domains are relevant to children's self-worth. Cross-sectional, longitudinal, and experimental evidence shows that children's self-evaluations in agentic domains—such as their self-perceived physical appearance, academic performance, and athletic ability—are strongly associated with their self-worth (Arens & Hasselhorn, 2014; Harter, 2000; Mendo-Lázaro et al., 2017; Slutzky & Simpkins, 2009; Yang et al., 2019). Other studies have shown that children's self-evaluations in communal domains—such as their self-perceived relationship quality with their parents and peers, and behavioral conduct—are strongly associated with their self-worth as well (Arens & Hasselhorn, 2014; Harris et al., 2017; Magro et al., 2018; Thomaes et al., 2010; Wagner et al., 2018). Despite a large body of empirical studies, meta-analytic evidence on how these two fundamental dimensions of self-evaluation are associated with children's global self-worth is lacking. Here, we empirically synthesize the associations between domain-specific self-evaluations and children's self-worth in middle to late childhood.

Cultural Differences

Cultural differences in ideals, norms, and practices are thought to shape the development of the self (Keller, 2020; Wang, 2004). Culture prescribes what being a “good person” entails, and self-worth can thus be understood as the extent to which individuals

view themselves as living up to culture-bound norms and expectations (Bleidorn et al., 2016; Crocker & Wolfe, 2001; Sedikides et al., 2003). The “self-centrality breeds self-enhancement” principle holds that adhering to standards central to the self is a primary source of self-worth. It also suggests that there are cultural differences in self-centrality of such standards (Sedikides et al., 2015). One cultural dimension that provides a useful proxy for describing cultural differences in how individuals perceive and socially contextualize themselves is collectivism–individualism (Hofstede, 1980; Markus & Kitayama, 1991; Triandis, 1989). Individualistic cultures (e.g., North-American, Australian, and most Western European cultures) emphasize ideals and norms surrounding independence, freedom of choice, and self-expression. By contrast, collectivistic cultures (e.g., East-Asian, South-American, and most African cultures) emphasize ideals and norms surrounding interdependence and social embeddedness. Accordingly, it has been proposed that individualistic cultures primarily assign importance to competence-based self-worth (i.e., feeling that one is capable and efficacious, akin to agency), and collectivistic cultures to liking-based self-worth (i.e., feeling that one is relationally competent and accepted by others, akin to communion; Tafarodi & Milne, 2002). This pattern has been supported in research in Eastern and Western cultures (Baranik et al., 2008; Kwan et al., 2009; Nezlek et al., 2008; Schmitt & Allik, 2005).

Cultural influences already operate from early development; as they grow up, children internalize cultural values, and they embody these values in their developing self-views (Keller, 2020; Nelson, 2003; Tomasello, 2016). Individualistic cultures typically encourage self-maximization and the fulfillment of personal goals and desires. This is reflected in socialization messages conveying to children the importance of personal effectiveness and distinctiveness (Gürel et al., 2020; Thomaes et al., 2017) and of independence and self-sufficiency (Kagitcibasi, 2005; Tamis-LeMonda et al., 2008). Collectivistic cultures typically encourage social responsibility and ingroup loyalty. Accordingly, children who grow up in such cultures are often socialized to embrace the importance of modesty, obedience, respect, and fitting in (X. Chen, 2000; Kagitcibasi, 2005; Tamis-LeMonda et al., 2008). Taken together, children growing up in individualistic cultures may derive their self-worth more from agentic than from communal domains, while children growing up in collectivistic cultures may derive their self-worth more from communal domains.

Over the past few decades, it has been debated how collectivism–individualism should be conceptualized and operationalized. At the level of individuals, collectivism and individualism can be studied as independent constructs, which implies that individuals can embrace both simultaneously (Oyserman & Uskul, 2008). By contrast, at the level of countries, collectivism and individualism are usually studied as opposite ends of the same spectrum (Hofstede et al., 2010; Santos et al., 2017). We relied on country-level measures of collectivism–individualism to examine cultural differences in the associations between domain-specific self-evaluations and children’s self-worth.

The Current Study

This preregistered meta-analysis presents the first comprehensive, cross-cultural analysis of how children’s domain-specific

self-evaluations are associated with their global self-worth. We build on and extend a recent meta-analysis (Dapp et al., 2023) that examined longitudinal associations between domain-specific self-evaluations and global self-worth in childhood, adolescence, and adulthood. While longitudinal data on these associations exist in childhood, they are scarce compared with cross-sectional data, and they have been collected predominantly in Western countries. In this meta-analysis, we relied on cross-sectional studies which allowed us to synthesize data from more diverse countries. Our study contributes to the literature by exploring cultural differences, investigating children’s self-evaluation along the two fundamental dimensions of agency and communion, and focusing on the foundational developmental stage of middle to late childhood.

We took two steps. First, we examined the centrality of domain-specific self-evaluations by exploring associations between children’s self-evaluations and their global self-worth, and how they vary across self-evaluation domains. Second, we examined whether these associations were moderated by country-level collectivism–individualism. We assessed country-level collectivism–individualism using two complementary indices: Hofstede’s collectivism–individualism index (Hofstede et al., 2010) and a time-sensitive collectivism–individualism index (Santos et al., 2017). We tested moderation by methodological and sample characteristics (i.e., measurement type, sample type, age, gender, race/ethnicity, socioeconomic status) as sensitivity analysis.

Method

We preregistered the research question, methods, and analyses with PROSPERO in 2020. We did not preregister hypotheses; our aim was to explore the associations between domain-specific self-evaluation and children’s global self-worth by aggregating the existing evidence. All data, analysis codes, research materials, and preregistration can be accessed at OSF (<https://osf.io/6yegt>).

Literature Search

The meta-analysis focused exclusively on the Self-Perception Profile for Children and the Self-Description Questionnaire I because they possess three critical features: (a) they assess both global self-worth and domain-specific self-evaluations, and there is considerable overlap between the domains included in both measures with good convergent validity (Donnellan et al., 2015); (b) they assess global self-worth independently from domain-specific self-evaluations (rather than as the average of domain-specific self-evaluations); and (c) they are frequently used and well-validated for research involving participants in middle to late childhood.

To identify relevant primary studies, we performed a three-step search procedure. First, using the Web of Science database, we searched for articles citing the Self-Description Questionnaire-I (SDQ-I; Marsh, 1986, 1987, 1988, 1990, 1993, 2007; Marsh et al., 1983) the Self-Perception Profile for Children (SPPC; Harter, 1985, 2012; Renick & Harter, 1989), or its predecessor, the Perceived Self-Competence Scale (PSCS; Harter, 1982).

Second, we conducted a literature search in the PsycINFO, ERIC, HAPI, and Web of Science databases. We used the search string “self description question* OR self perception profil* AND child*” to find additional articles that potentially used (one of) our focal measures (the asterisk allows for searching terms with alternate endings).

Third, to identify potentially relevant unpublished manuscripts, we screened the reference lists of the included articles and reached out to researchers cited more than once in our included studies. We also announced our request for unpublished data via social media and “listservs” of research organizations in developmental, social, personality, and cultural psychology (see Supplementary Material S1 for our efforts to search for unpublished data).

We ended our database search in December 2020 and unpublished data search in September 2022. After removing duplicates, our search strategy resulted in a total of 6,960 potentially eligible records.

Inclusion Criteria

Studies eligible for inclusion had to meet the following criteria: (a) they were empirical and quantitative; (b) they reported at least one zero-order cross-sectional correlation between global self-worth and at least one domain-specific self-evaluation; (c) participants did not take part in an intervention program (i.e., only baseline and control group data from intervention studies were used); and (d) participants in middle to late childhood were sampled (i.e., sample mean age ± 1 *SD* had to fall in the range from 8.00 to 12.99). If sample mean age and *SD* were not reported, we searched for proxy indices of age (e.g., grade level or age range). If grade level was reported, we verified children’s typical age in the relevant grade level in the pertaining country. If only an age range was reported, it needed to fall in the range of 8.00 and 12.99 years.

We conducted a two-step screening to determine the eligibility of the reports (Figure 1). First, we screened titles and abstracts. Two raters independently screened 10% of the records with good interrater agreement (Cohen’s $\kappa = .96$). Inconsistencies were discussed until full consensus was reached. Second, we read the full-texts of potentially eligible reports. Again, raters independently screened 10% of the reports with good interrater agreement (Cohen’s $\kappa = .82$). Disagreements were once again resolved via discussion until full consensus on eligibility was reached. A total of 93 published articles and 1 unpublished report were included.

Coding of Studies

We coded the following sample characteristics: (a) mean age; (b) gender (i.e., percentage of female participants); (c) racial/ethnic status (i.e., percentage of racial/ethnic majority participants); (d) sample type (i.e., typical, nontypical, or mixed; we operationalized nontypical samples as samples recruited for the purpose of overrepresenting children with a mental or physical problem, such as obesity, learning difficulty, or a psychiatric or other medical diagnosis); (e) measurement type (i.e., the Harter or Marsh measures); (f) socioeconomic status (i.e., high, middle, low, or mixed); (g) sample size; and (h) effect size (i.e., zero-order correlation coefficient). When studies reported effect sizes for both

a total sample and subgroups (e.g., for males and females separately), we only included the effect sizes reported for the subgroups to maximize the number of effect sizes.

We used two country-level indices of collectivism–individualism. First, we used the well-established Hofstede’s collectivism–individualism index (Hofstede et al., 2010), which represents the degree of independence between members in a society. Adding to our preregistered approach, we included a second index of time-sensitive collectivism–individualism (Santos et al., 2017), because a country’s level of collectivism–individualism can change across time (Hamamura, 2012; Kashima, 2014; Morris et al., 2015). This index is calculated by averaging standardized values for three culture-level indicators from the World Value Survey 1981–2020 time-series dataset (Haerper et al., 2022; data available in every 5 years): (a) perceiving friends as more important than family; (b) attaching importance to cultivating independence in children; and (c) prioritizing personal self-expression over other values. The two indices of collectivism–individualism were positively correlated, $r = .49$, $p < .001$. For both measures, higher scores indicate higher levels of individualism and lower levels of collectivism; and lower scores indicate high levels of collectivism and lower levels of individualism.

To determine the interrater reliability of the coding process, around 10% ($n = 11$) of the included reports were double-coded by a second coder. Interrater reliability was good, with intraclass correlations (ICC) for continuous variables ranging from .87 to 1, and Cohen’s κ for categorical variables ranging from .84 to 1. Coding disagreements were discussed and fully resolved.

Data Analysis

Studies often included multiple effect sizes derived from the same sample (e.g., effects sizes for the associations between various domains of self-evaluations and global self-worth). We performed a three-level meta-analysis (Assink & Wibbelink, 2016), which allowed us to include multiple effect sizes from one study while accounting for their dependency by modeling the hierarchical structure of the data (Assink et al., 2015; Van den Noortgate & Onghena, 2003). First, we estimated an overall association between self-evaluations and global self-worth in an intercept-only random effect model. Second, we performed two separate one-sided log-likelihood ratio tests to determine whether the within-study variance (at Level 2 of the model) and the between-study variance (at Level 3 of the model) in effect sizes were significant. In case of significant heterogeneity, we extended the random effect model to mixed effect models in bivariate moderator analyses to test whether the strength of the association between self-evaluations and global self-worth varies across domains (i.e., across individual domains, as well as across domains aggregated into overarching agentic and communal dimensions). Third, we explored potential interaction effects between domains and country-level collectivism–individualism. Finally, we conducted sensitivity analyses in which we tested potential moderating effects of study design and sample characteristics (i.e., measurement type, sample type, age, gender, race/ethnicity, and socioeconomic status).

We analyzed the data in R (R Development Core Team, 2016), using the metafor package (Viechtbauer, 2015) and syntax developed by Assink and Wibbelink (2016). We used the *rma.mv*

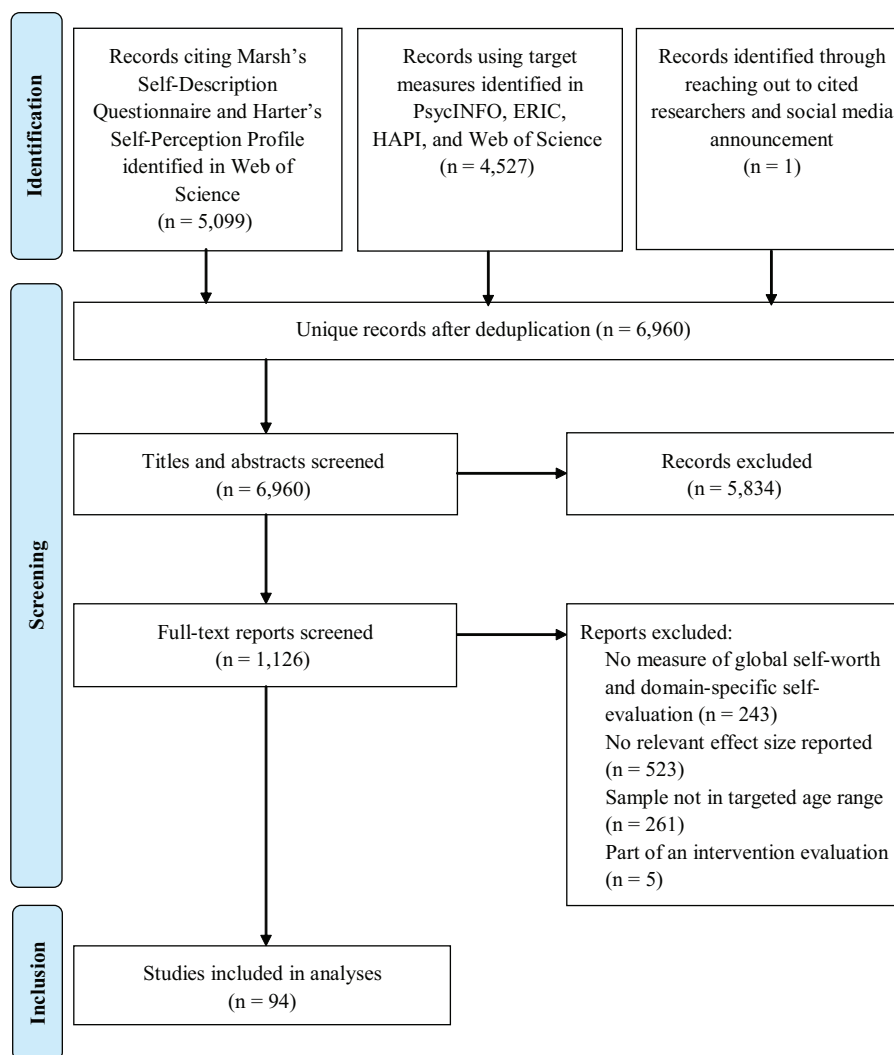


Figure 1. Flow Diagram of Study Inclusion.

function of the metafor package to build three-level models and estimated model parameters using the restricted maximum likelihood method (REML; Viechtbauer, 2005). Prior to conducting the analyses, we converted Pearson's r values to Fisher's z values (Lipsey & Wilson, 2001). After conducting the analyses, we transformed the Fisher's z values back into Pearson's r for interpretability. We mean-centered continuous moderator variables, and recoded categorical variables into dummy variables. We used two-tailed tests throughout, unless otherwise specified.

Risk of Bias Assessment

Publication bias (i.e., statistically significant findings are more likely to be published than nonsignificant findings) can cause inflated estimates of an effect. We anticipated that publication bias would not be a problem in our meta-analysis, because the associations we focus on (i.e., between domain-specific self-evaluations and global self-worth) were typically not the main focus of the included research. Nevertheless, we used multiple

statistical methods to detect potential publication bias (Carter et al., 2019). We examined the funnel plot, which plotted effect sizes against their standard error. Publication bias would introduce asymmetry in the funnel plot, reflecting that nonsignificant and negative effect sizes are less likely to be published (Borenstein et al., 2009). We applied two methods to quantify asymmetry in the funnel plot: the Egger's regression test (Egger et al., 1997) and the Trim and Fill method (Duval & Tweedie, 2000). We also conducted the p -uniform analysis (van Assen et al., 2015) and the PET-PEESE technique (Stanley & Doucouliagos, 2014) to detect potential publication bias.

Results

Included Studies

We identified 94 eligible studies reporting 584 effect sizes obtained from 141 independent samples, with an aggregate sample size of 33,120 participants (see Supplementary Material S2

Table 2. Number of Effect Sizes from Different Countries/Regions and Their Level of Collectivism–Individualism.

	Mean sample size	Number of effect sizes	Hofstede collectivism–individualism score	Time-sensitive collectivism–individualism score range ^a	Range of publication years
Australia	256	66	90	–1.42 to 0.88	1984–2018
Belgium	155	10	75	–	1997–2016
Canada	236	54	80	0.41 to 0.84	1988–2019
China	254	9	20	–0.34 to –0.25	2002–2010
China Hong Kong	125	5	25	–	1996
China Taiwan	497	8	17	–0.40	1985–1997
Germany	438	21	67	0.51 to 0.89	2003–2014
Ghana	95	1	15	–	2013
Greece	87	11	35	–0.47 to 0.27	2003–2020
Israel	221	3	54	–	1994
Italy	194	2	76	–0.03	2004
Lebanon	105	5	40	–0.27	2010
Netherlands	582	42	80	0.33 to 0.89	1993–2020
Norway	34	10	69	–	2012
Peru	746	7	16	–1.37	2013–2014
Poland	432	5	60	–0.44	2014
Spain	167	30	51	–0.27 to –0.26	2004–2014
Switzerland	141	28	68	0.59	2012–2017
United Arab Emirate	62	5	25	–	2000
United Kingdom	77	83	89	0.34 to 0.65	1987–2012
United States	201	176	91	–1.02 to 0.78	1982–2013
United States/Canada ^b	100	3	85.5	0.39	2017

Note. ^aTime-sensitive collectivism–individualism scores are standardized scores.

^bOne study did not distinguish between participants from the United States and Canada. We averaged the collectivism–individualism scores of the two countries for this study.

for descriptive information of included studies). Sample sizes ranged from $N=9$ to 2,007 ($M=235$, $SD=290$, $Mdn=145$). Sample mean age (reported for 64% of the samples) ranged from 8.00 to 12.45 years ($M=10.56$, $SD=1.01$, $Mdn=10.73$). Sample proportion of female participants (reported for 90% of the samples) ranged from 0% to 100% ($M=50%$, $SD=30%$, $Mdn=50%$). Sample proportion of majority ethnicity (reported for 42% of the samples) ranged from 0% to 100% ($M=69%$, $SD=38%$, $Mdn=86%$). Sample socioeconomic status (reported for 50% of the samples) was most often “mixed” (37%), then “middle to low” (31%), “middle” (16%), or “middle to upper” (16%). Sample type was most often “typical” (79%), then “nontypical” (15%), or “mixed” (6%).

We included samples from 21 countries/regions (see Table 2 for the country-level collectivism–individualism distribution). Although most samples were from countries/regions scoring relatively high (>55) on Hofstede’s collectivism–individualism index ($n=500$, comprising 85.62% of total effect sizes), we retrieved a sizable number of samples from countries/regions scoring low on this index. Specifically, we retrieved 84 effect sizes (comprising 14.38% of total effect sizes) from 22 independent samples, including a total of 5,372 participants, from countries/regions scoring relatively low (<55) on Hofstede’s collectivism–individualism index, including China, Ghana, Greece, Hongkong, Israel, Lebanon, Peru, Spain, Taiwan, and United Arab Emirates. This variation allowed us to test moderation by country-level collectivism–individualism.

Overall Association and Effect Size Heterogeneity

The analysis yielded a large overall effect size (Cohen, 1992), $r=.51$, 95% CI = [0.49, 0.53], $p<.001$, indicating that more positive domain-specific self-evaluations are correlated with higher global self-worth. We found a heterogeneous distribution of effect sizes, both within studies (i.e., variance at level 2), $\chi^2(1)=2,822.74$, $p<.001$ (representing 64.23% of the total variance), and between studies (i.e., variance at level 3), $\chi^2(1)=56.82$, $p<.001$ (representing 28.03% of the total variance). Thus, the associations between children’s self-evaluations and global self-worth varied within the same studies (e.g., across domains of self-evaluation) and between studies (e.g., across various samples).

Moderation by Domain

We found a significant moderating effect of domains in the associations between self-evaluations and global self-worth, $F(5, 578)=43.28$, $p<.001$ (see Table 3). The association was significantly stronger for physical appearance, $r=.64$, 95% CI = [0.61, 0.66], $p<.001$, than for any other domain, $ps<.001$. Behavioral conduct, $r=.54$, 95% CI = [0.51, 0.57], $p<.001$, and peer relations, $r=.52$, 95% CI = [0.49, 0.54], $p<.001$, did not differ significantly in their association with global self-worth, $p=.307$. Academic competence, $r=.49$, 95% CI = [0.45, 0.51], $p<.001$, was less strongly related with global self-worth than were physical appearance, behavioral conduct, and peer relations, $ps<.017$,

Table 3. Bivariate Moderator Analyses.

	s	k	b_0 (95% CI)	r	b_1 (95% CI)	F (df1, df2)
Model 1: Domains (Individual)	141	584	–	–	–	43.28 (5, 578)***
Physical appearance (RC) ^a	89	103	0.75 (0.71, 0.79)***	.64	–	
Behavioral conduct	61	73	0.61 (0.56, 0.65)***	.54	–0.15 (–0.20, –0.09)***	
Peer relations	124	141	0.58 (0.54, 0.61)***	.52	–0.18 (–0.22, –0.13)***	
Academic competence	118	134	0.53 (0.49, 0.56)***	.49	–0.23 (–0.27, –0.18)***	
Athletic competence	104	114	0.42 (0.38, 0.46)***	.40	–0.33 (–0.38, –0.29)***	
Parent relations	18	19	0.41 (0.33, 0.49)***	.39	–0.35 (–0.43, –0.26)***	
Model 2: Domains (Dimensions)	141	584	–	–	–	0.27 (1, 582)
Agentic Dimension (RC)	129	351	0.56 (0.53, 0.69)***	.51	–	
Communal Dimension	127	233	0.57 (0.53, 0.60)***	.52	0.01 (–0.03, 0.04)	
Model 3: Col–Ind (Hofstede index)	141	584	0.56 (0.53, 0.59)***	–	0.00 (–0.00, 0.00) ^b	0.26 (1, 582)
Model 4: Col–Ind (Time-sensitive index)	107	447	0.56 (0.52, 0.60)***	–	0.04 (–0.02, 0.10)	1.47 (1, 445)

Note. Results of bivariate moderator analyses in which individual domains (Model 1), domain dimensions (Model 2), the Hofstede collectivism–individualism index (Model 3), and the time-sensitive collectivism–individualism index (Model 4) were tested as moderators. s = number of independent studies; k = number of effect sizes; b_0 = intercept/mean effect size (Fisher's z); r = intercept/mean effect size (Pearson's correlation), obtained by transforming Fisher's z (b_0) into r ; b_1 = estimated regression coefficient representing the difference in (mean) effect between a category and a reference category (Models 1 and 2) or the slope (Models 3 and 4); CI = confidence interval; F ($df1$, $df2$) = omnibus test of all slopes being zero; df = degrees of freedom; RC = reference category representing the category against which other categories were tested (Models 1 and 2); Col–Ind = collectivism–individualism.

^aHere, we present the results with physical appearance as the reference category, given its strongest correlation with global self-worth. However, we conducted multiple moderation analyses using each domain as reference category. The results of these analyses are reported in the text.

^bThese estimates are rounded to zero as they represent very small effects.

*** $p < .001$.

but was more strongly related with global self-worth than were athletic competence and parent relations, $ps < .005$. Athletic competence, $r = .40$, 95% CI = [0.36, 0.43], $p < .001$, and parent relations, $r = .39$, 95% CI = [0.32, 0.45], $p < .001$, did not differ significantly in their association with global self-worth, $p = .770$.

Next, we aggregated domains into overarching dimensions of agency (i.e., athletic competence, academic competence, and physical appearance) and communion (i.e., peer relations, parent relations, and behavioral conduct). There was no significant moderating effect of these overarching dimensions, $F(1, 582) = 0.27$, $p = .606$. Thus, agentic self-evaluations, $r = .51$, 95% CI = [0.49, 0.53], $p < .001$ and communal self-evaluations, $r = .52$, 95% CI = [0.49, 0.54], $p < .001$, did not differ significantly in their association with global self-worth.

Moderation by Domain and Collectivism–Individualism

We then tested the domain \times country-level collectivism–individualism interaction on the associations between self-evaluations and global self-worth. First, we examined the Hofstede collectivism–individualism index. There was no significant interaction between the domains and the Hofstede index, as there was no significant difference in the model fit of (a) the full model with main effects and interaction effects (Table 4) and (b) the reduced model with only main effects (Table 3), $\chi^2(5) = 5.11$, $p = .402$. The effect of collectivism–individualism on the associations between self-evaluation and global self-worth was thus similar across domains, and it was not significant for any of the domains, $ps > .123$. There was also no significant interaction between the overarching dimensions (i.e., agency and communion) and the Hofstede index, $\chi^2(1) < .68$, $p = .409$. The effect of

collectivism–individualism on the associations between self-evaluation and global self-worth was thus similar across overarching dimensions, and for both dimensions the effect was not significant, $ps > .386$.

Second, we examined the time-sensitive collectivism–individualism index. Similarly, there was no significant interaction between domains and the time-sensitive collectivism–individualism index, $\chi^2(5) = 1.88$, $p = .865$. The effect of collectivism–individualism on the associations between self-evaluation and global self-worth was thus similar across domains, and the effect was not significant for any of the domains, $ps > .171$. There was also no significant interaction between the overarching dimensions and the time-sensitive collectivism–individualism index, $\chi^2(1) = .02$, $p = .876$. The effect of collectivism–individualism on the associations between self-evaluation and global self-worth was similar across the overarching dimensions, and for both dimensions the effect was not significant, $ps > .245$.

Together, there was no evidence that the strength of the associations between children's self-evaluations and their global self-worth was dependent on country-level collectivism–individualism. That said, between-country differences may be captured by cultural dimensions other than collectivism–individualism. We therefore also explored associations between domain-specific self-evaluations and global self-worth across world regions (see Supplementary Material S3), which we did not preregister. This exploratory analysis did not reveal meaningful differences across world regions, except that in Northern Europe, agentic self-evaluations were more strongly correlated with global self-worth than were communal self-evaluations. In other regions, there was no such difference. Thus, while subtle differences may exist, the patterns of association between children's domain-specific self-evaluations and self-worth are similar across most world regions.

Table 4. Moderator Analyses Testing the Interaction Between Domains and Collectivism–Individualism.

	s	k	b_0 (Mean association per domain)/slope of Col–Ind per domain (95% CI)	b_1 (Δ Mean association relative to RC/ Δ slope of Col–Ind relative to RC) (95% CI)	F (df1, df2)
Model 5: Domains (Individual) * Col–Ind (Hofstede index)	141	584	–	–	20.60 (11, 572)***
Physical appearance (RC)	89	103	0.75 (0.71, 0.79)***	–	
Behavioral conduct	61	73	0.60 (0.55, 0.65)***	–0.16 (–0.21, –0.10)***	
Peer relations	124	141	0.58 (0.54, 0.62)***	–0.17 (–0.22, –0.13)***	
Academic competence	118	134	0.53 (0.49, 0.56)***	–0.23 (–0.27, –0.18)***	
Athletic competence	104	114	0.42 (0.38, 0.46)***	–0.33 (–0.38, –0.29)***	
Parent relations	18	19	0.41 (0.32, 0.49)***	–0.35 (–0.43, –0.26)***	
Physical appearance \times Col–Ind (RC)	89	103	0.00 (–0.00, 0.00) ^a	–	
Behavioral conduct \times Col–Ind	61	73	–0.00 (–0.01, 0.00) ^a	–0.00 (–0.01, 0.00) ^a	
Peer relations \times Col–Ind	124	141	0.00 (–0.00, 0.00) ^a	0.00 (–0.00, 0.00) ^a	
Academic competence \times Col–Ind	118	134	–0.00 (–0.00, 0.00) ^a	–0.00 (–0.00, 0.00) ^a	
Athletic competence \times Col–Ind	104	114	0.00 (–0.00, 0.00) ^a	0.00 (–0.00, 0.00) ^a	
Parent relations \times Col–Ind	18	19	0.01 (–0.01, 0.01) ^a	0.01 (–0.01, 0.01) ^a	
Model 6: Domains (Dimensions) \times Col–Ind (Hofstede index)	141	584	–	–	0.41 (3, 580)
Agentic Dimension (RC)	129	351	0.56 (0.53, 0.58)***	–	
Communal Dimension	127	233	0.57 (0.53, 0.60)***	0.01 (–0.03, 0.04)	
Agentic Dimension \times Col–Ind (RC)	129	351	0.00 (–0.00, 0.00) ^a	–	
Communal Dimension \times Col–Ind	127	233	–0.00 (–0.00, 0.00) ^a	–0.00 (–0.00, 0.00) ^a	
Model 7: Domains (Individual) \times Col–Ind (Time-sensitive index)	107	447	–	–	23.28 (11, 435)***
Physical appearance (RC)	71	83	0.76 (0.70, 0.82)***	–	
Behavioral conduct	49	59	0.61 (0.54, 0.67)***	–0.15 (–0.22, –0.08)***	
Peer relations	95	109	0.56 (0.52, 0.61)***	–0.20 (–0.25, –0.14)***	
Academic competence	87	99	0.52 (0.48, 0.57)***	–0.24 (–0.29, –0.18)***	
Athletic competence	77	84	0.40 (0.34, 0.45)***	–0.36 (–0.42, –0.30)***	
Parent relations	13	13	0.40 (0.29, 0.51)***	–0.36 (–0.47, –0.25)***	
Physical appearance \times Col–Ind (RC)	71	83	0.06 (–0.03, 0.15)	–	
Behavioral conduct \times Col–Ind	49	59	0.04 (–0.07, 0.14)	–0.03 (–0.14, 0.09)	
Peer relations \times Col–Ind	95	109	0.05 (–0.02, 0.13)	–0.01 (–0.10, 0.08)	
Academic competence \times Col–Ind	87	99	0.02 (–0.05, 0.10)	–0.04 (–0.13, 0.05)	
Athletic competence \times Col–Ind	77	84	0.02 (–0.06, 0.10)	–0.05 (–0.14, 0.05)	
Parent relations \times Col–Ind	13	13	–0.00 (–0.14, 0.14) ^a	–0.06 (–0.21, 0.08)	
Model 8: Domains (Dimensions) \times Col–Ind (Time-sensitive index)	107	447	–	–	0.53 (3, 443)
Agentic Dimension (RC)	97	266	0.56 (0.51, 0.60)***	–	
Communal Dimension	97	181	0.56 (0.52, 0.61)***	0.04 (–0.04, 0.06)	
Agentic Dimension \times Col–Ind (RC)	97	266	0.04 (–0.03, 0.11)	–	
Communal Dimension \times Col–Ind	97	181	0.03 (–0.04, 0.1)	–0.01 (–0.08, 0.07)	

Note. Results of moderator analyses that tested the following interactions: individual domains \times Hofstede index (Model 5), domain dimensions \times Hofstede index (Model 6), individual domains \times time-sensitive index (Model 7), and domain dimensions \times time-sensitive index (Model 8). s = number of independent studies; k = number of effect sizes; CI = confidence interval; F (df1, df2) = omnibus test in which the slopes (b_1 values) are tested at once; RC = reference category representing the category against which other categories were tested; Col–Ind = collectivism–individualism.

^aThese estimates are rounded to zero as they represent very small effects.

*** $p < .001$.

Robustness Analyses

We conducted additional bivariate moderator analyses to examine whether our results held across methodological and sample variations (i.e., measurement type, sample type, age, gender, race/ethnicity, and socioeconomic status; see Table 5). We found no significant moderating effect for any of these demographic variables. The associations between self-evaluations and global self-worth did not vary across samples of different ages, $\beta_1 = .02$, 95% CI = [–0.01, 0.04], $p = .249$, or samples with varying proportions of female participants, $\beta_1 = -.00$, 95% CI = [–0.08, .08], $p = .996$, or samples with varying proportions of ethnic majority

participants, $\beta_1 = -.08$, 95% CI = [–0.17, 0.02], $p = .110$. The associations between self-evaluations and global self-worth were similar for typical samples, $r = .52$, 95% CI = [0.49, 0.54], $p < .001$, nontypical samples, $r = .49$, 95% CI = [0.42, 0.54], $p < .001$, and mixed samples, $r = .46$, 95% CI = [0.36, 0.54], $p < .001$. The associations between self-evaluations and global self-worth were similar for samples of mixed socioeconomic status, $r = .49$, 95% CI = [0.45, 0.53], $p < .001$, lower-to-middle socioeconomic status, $r = .53$, 95% CI = [0.49, 0.57], $p < .001$, middle socioeconomic status, $r = .52$, 95% CI = [0.45, 0.58], $p < .001$, and middle-to-higher socioeconomic status, $r = .48$, 95% CI = [0.41, 0.54], $p < .001$. The associations between

Table 5. Robustness Analyses.

	s	k	b_0 (95% CI)	r	b_1 (95% CI)	F (df1, df2)
Model 9: Sample type	141	584	–	–	–	1.09 (2, 581)
Typical (RC)	111	481	0.57 (0.55, 0.61)***	.52	–	
Nontypical	21	76	0.53 (0.45, 0.61)***	.49	–0.04 (–0.13, 0.04)	
Mixed	9	27	0.50 (0.38, 0.61)***	.46	–0.07 (–0.19, 0.05)	
Model 10: Socioeconomic status	70	297	–	–	–	1.03 (3, 293)
Mixed (RC)	26	120	0.53 (0.48, 0.59)***	.49	–	
Middle to lower class	22	97	0.59 (0.53, 0.65)***	.53	0.06 (–0.02, 0.14)	
Middle class	11	48	0.57 (0.49, 0.66)***	.52	0.04 (–0.06, 0.14)	
Middle to higher class	11	32	0.52 (0.43, 0.61)***	.48	–0.01 (–0.11, 0.10)	
Model 11: Measurement type	141	584	–	–	–	3.50 (1, 582)
Harter's measures (RC)	119	477	0.55 (0.52, 0.58)***	.50	–	
Marsh's measure	24	107	0.61 (0.55, 0.68)***	.54	0.06 (–0.00, 0.13)	
Model 12: Mean age	90	363	0.55 (0.52, 0.58)***	–	0.02 (–0.01, 0.04)	1.33 (1, 361)
Model 13: Female participants (%)	127	516	0.54 (0.52, 0.57)***	–	–0.00 (–0.08, 0.08) ^a	0.00 (1, 514) ^a
Model 14: Majority ethnicity (%)	59	219	0.56 (0.52, 0.59)***	–	–0.08 (–0.17, 0.02)	2.58 (1, 217)

Note. Results of bivariate moderator analyses in which sample type (Model 9), socioeconomic status (Model 10), measurement type (Model 11), mean age (Model 12), female participants proportion (Model 13), and majority ethnicity proportion (Model 14) were tested as moderators. s = number of independent studies; k = number of effect sizes; b_0 = intercept/mean effect size (Fisher's z); r = intercept/mean effect size (Pearson's correlation), obtained by transforming Fisher's z (b_0) into r ; b_1 = estimated regression coefficient representing the difference in (mean) effect between a category and the reference category (Models 9–11) or the slope (Models 12–14); CI = confidence interval; F ($df1$, $df2$) = omnibus test of all slopes being zero; df = degrees of freedom; RC = reference category representing the category against which other categories were tested (Models 1 and 2).

^aThese estimates are rounded to zero as they represent very small effects.

*** $p < .001$.

self-evaluations and global self-worth were similar for effect sizes measured with Marsh's measure, $r = .54$, 95% CI = [0.50, 0.59], $p < .001$, and Harter's measures, $r = .50$, 95% CI = [0.48, 0.52], $p < .001$.

Sensitivity Analyses

To address the potential influence of outliers in our analyses, we searched for outliers using the “influence” command of the metafor package (Viechtbauer, 2010). We identified five large positive effect sizes (r s ranging from .85 to .98) as potential outliers based on significant DFFITS values (indicating a difference in the predicted average effect when these effect sizes were included versus excluded in model fitting; Viechtbauer & Cheung, 2010). The sample sizes of these five effect sizes ranged from 103 to 320. We carefully examined the effect size codings of these studies and found no indications of errors or implausible values. Therefore, we decided to retain all effect sizes in the meta-analytic dataset. This decision aligns with previous study (Orth et al., 2021) and methodological literature that discourages the routine exclusion of studies solely based on extremely large or small effect sizes (Viechtbauer & Cheung, 2010). Nevertheless, we conducted a sensitivity analysis to investigate the potential influence of outliers in our analyses (see Supplementary Material S4). This analysis suggested our main findings remained unchanged after removing the outliers.

Bias Assessment

The risk of bias tests showed no indications of publication bias. We did, however, find some indications that large effect sizes were underrepresented, suggesting that the initially estimated overall effect size may underestimate the true effect size. The Egger's regression test was nonsignificant, suggesting that the

funnel graph did not deviate significantly from a symmetrical shape, $z = -0.18$, $p = .857$. The trim-and-fill algorithm indicated that 113 effect sizes needed to be imputed to the right side of the plot to attain optimal symmetry (Figure 2). Accordingly, the adjusted overall effect size increased to $r = .56$, 95% CI = [0.55, 0.58], $p < .001$, which is slightly higher than the initially estimated overall effect size ($\Delta r = .05$). The p -uniform model indicated that the distribution of effect sizes did not violate the “uniform” null hypothesis, ($L_{pb} = 0.56$, $p = .286$), and produced a slightly higher adjusted overall effect size of $r = .55$, 95% CI = [0.54, 0.56]). The result of the PEESE model was interpreted as β_{0PET} is significantly larger than zero. The non-significant slope suggested no evidence of publication bias, $\beta_1 = 1.74$, $t(582) = 1.07$, $p = .284$, with the intercept presenting a slightly higher adjusted overall effect size, $\beta_0 = 0.55$, $p < .001$.

We note that some caution in interpreting these tests is needed, given that their accuracy has not yet been extensively studied for three-level meta-analyses with heterogeneous datasets like ours. Accordingly, we interpreted the effect sizes produced by these various bias assessment techniques as a plausible range of effect sizes, rather than “corrected” effect sizes (Coburn & Vevea, 2015; Terrin et al., 2003).

Discussion

This preregistered meta-analysis provided a comprehensive, cross-cultural analysis of how children's domain-specific self-evaluations are associated with their global self-worth. We synthesized a large body of work spanning 141 independent samples and 33,120 participants from 21 countries/regions. Across countries, children's self-evaluation of physical appearance was most strongly correlated with their self-worth, with a large effect size. Children's self-evaluations of behavioral conduct, peer relations, academic competence, athletic competence, and parent relations were less strongly

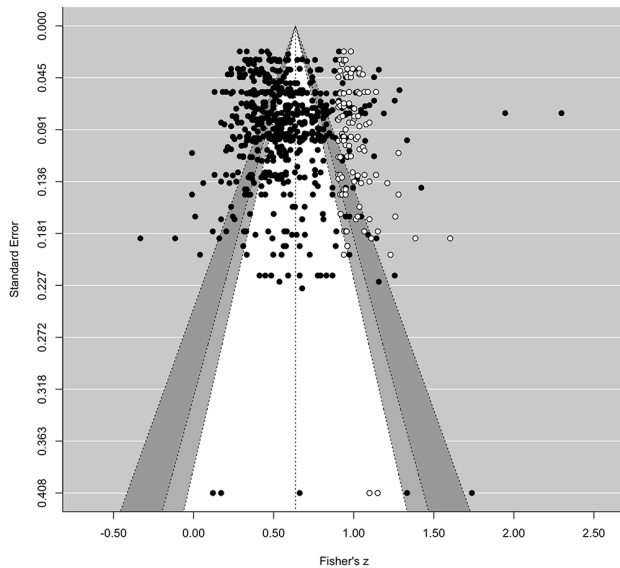


Figure 2. Funnel Plot. Effect sizes (*x*-axis) are plotted against their standard errors (*y*-axis). The black dots denote observed effect sizes, the white dots denote imputed effect sizes. The solid vertical line represents the overall mean effect. From inside to outside, the dashed lines limit the 90%, 95%, and 99% pseudo confidence interval regions.

correlated with global self-worth, but still showed medium-to-large effect sizes. Agentic self-evaluations (i.e., physical appearance, academic competence, and athletic competence) and communal self-evaluations (i.e., parent relations, peer relations, and behavioral conduct) did not differ in strength of association with global self-worth. Importantly, none of the associations between children's self-evaluations and global self-worth varied by country-level collectivism–individualism. Our findings were robust across methodological and sample characteristics.

Theoretical Implications

Children incorporate domain-specific self-evaluations into their global self-worth (Harter, 2012; Marsh, 1990; Shavelson et al., 1976). The present work revealed the associations of these self-evaluations with children's global self-worth, and its cross-cultural variation. Our finding that children's self-evaluation of physical appearance is most central to their self-worth has been observed previously. This is consistent with a recent meta-analysis that synthesized the longitudinal associations between global and domain-specific self-worth, showing that physical appearance was the strongest predictor of global self-worth, compared with other self-evaluative domains (Dapp et al., 2023). Some scholars have even suggested that children's self-worth is only “skin-deep” (Harter, 2000, p. 133). Unlike other domains, physical appearance is readily visible, subject to continuous social evaluation, and beyond children's direct control. In middle and late childhood, children are concerned about how their appearance is judged by others, and they recognize that their appearance is an important source of others' approval (Jensen & Steele, 2008; Q. Li et al., 2019; Silverman et al., 1995). The perceived importance of physical appearance is already salient in middle to late childhood, a period when children begin to generate a global sense of self-worth (Harter, 2003). Together, these

factors may account for why, across cultures, self-perceived physical appearance is so central to global self-worth at this age.

The fact that physical appearance is central to children's self-worth suggests that children may be particularly vulnerable to repeated exposure to society's beauty ideals. Children's widespread use of social media platforms and exposure to content that reinforces beauty ideals may further exacerbate children's concerns about their own appearance (Richards et al., 2015; Saiphoo & Vahedi, 2019), potentially undermining their global self-worth. Acknowledging the centrality of physical appearance to children's self-worth is crucial for tailoring interventions and support systems that aim to address the potential negative impact of societal pressures and help children develop healthy self-worth.

Although less central than physical appearance, children's self-evaluations in other domains also correlate strongly with their self-worth. From middle childhood, children realize that social conformity and morally good behaviors are valued by peers and adults (Carpendale, 2000), which is reflected in the strong correlation between self-evaluated behavioral conduct and self-worth. In addition, establishing positive social relationships and attaining academic skills (and, to a lesser extent, developing athletic ability) are central developmental tasks in childhood (Erikson, 1959; Isabella & Diener, 2010). This is reflected in the strong correlations between self-evaluated parent and peer relations, and academic and athletic ability and children's self-worth.

Agency and communion have consistently appeared as two overarching dimensions of self-evaluation that underlie self-worth in adults (Crocker & Wolfe, 2001; Tafarodi & Swann, 1995) as well as children (Butler & Gasson, 2005; Harter, 2012). Our findings show that children's agentic and communal self-evaluations are about equally central to their global self-worth. This is in line with theoretical perspectives suggesting that experiences of both competence and relatedness are vital for healthy psychological development (Dweck, 2017; Ryan & Deci, 2000). During middle and late childhood, children often receive feedback relevant to their competence (e.g., at school), and they are generally aware of their competence relative to their peers (Cole et al., 2001; Dijkstra et al., 2008; Muenks et al., 2018). At the same time, children this age attach importance to forming and sustaining positive relationships with their peers and parents (Kerns & Richardson, 2008; Nickerson & Nagle, 2005; Parker et al., 2006). These parallel developments may account for why children's global self-worth is correlated with self-evaluations of agentic and communal functioning to a similar degree.

Our research provided the first systematic test of potential cross-cultural differences in the self-evaluative correlates of children's self-worth. We included data from across the world, ranging from countries high on individualism (e.g., Australia, the United States, and the United Kingdom) to countries high on collectivism (e.g., China, Ghana, and Peru). Several theorists have argued, mainly based on research with adults, that the sources of self-worth can differ across cultures (Crocker & Wolfe, 2001; Novin et al., 2015; Pyszczynski et al., 2004). We did not find such differences across the cultural dimension of collectivism–individualism in children. Why might this be? Children's main developmental tasks are relatively independent of the cultural context they grow up in. For example, children are universally motivated to acquire knowledge and learn, and to form close or supportive social relationships (Dweck, 2017; Greenfield et al., 2003; Ryan & Deci, 2000). Furthermore, while establishing physical attractiveness is not a developmental task per se,

children do care about their appearance more generally because it is consequential for their social experiences and sense of effectiveness (Harter, 2000; Marsh, 1986). The universal importance of these domains (Barker & Bornstein, 2010; Harter, 2000) may help to explain why we found no cultural differences.

Strengths and Limitations

We conducted the first meta-analysis of the self-evaluative correlates of children's self-worth and their cross-cultural variation. Strengths of our research include its focus on the critical developmental period of middle to late childhood, its inclusion of studies from diverse countries/regions, and its extensive robustness analysis. Our meta-analysis also has limitations. First, we focused on collectivism–individualism because of its theoretical relevance to self-development. We found similar patterns of results across two complementary indices of collectivism–individualism. However, these indices do not capture different types of collectivism and individualism (e.g., vertical vs. horizontal; Singelis et al., 1995; Vignoles et al., 2016), nor do they reflect within-culture differences in collectivism–individualism. We call for research to develop cross-cultural indices that reflect different types of collectivism–individualism and are more sensitive to within-culture variation.

Second, although we were able to retrieve enough effect sizes to explore cultural differences, most of the studies we included were conducted in Western, Educated, Industrialized, Rich, and Democratic (WEIRD) countries (Henrich et al., 2010; Nielsen et al., 2017). Unfortunately, this reflects a broader underrepresentation of non-WEIRD samples in the social and behavioral sciences (Henrich et al., 2010). Samples from Africa, South America, and the Middle East were especially underrepresented. Future work will need to correct this underrepresentation to establish a truly global science of self-development.

Third, we relied on research that used cross-sectional correlational designs, our findings do not speak of the directionality of effects. Children's domain-specific self-evaluations and global self-worth may influence each other bidirectionally over time (Dapp et al., 2023; Rentzsch & Schröder-Abé, 2022). Some scholars have theorized that domain-specific self-evaluations serve as the foundation for the development of children's global self-worth (e.g., Harter, 2003). Conversely, other scholars have theorized that global self-worth impacts children's self-evaluation in specific domains (e.g., Brown et al., 2001). For example, children with higher (vs. lower) levels of global self-worth are more likely to maintain positive domain-specific self-evaluations following failure (Brown et al., 2001). Future longitudinal work could scrutinize the psychological mechanisms that drive the co-development of children's self-evaluations and global self-worth over time.

We used the correlations between domain-specific self-evaluations and global self-worth as a proxy for the importance of these domains for children's global self-worth. However, we did not directly measure the importance that children assign to these domains. Prior research suggests that the impact of a specific domain on global self-worth may vary based on individuals' perceived importance of that domain (Harter, 2003; Marsh, 1993; Rosenberg et al., 1995). Therefore, future studies should directly measure the importance assigned by children to each domain to obtain a more comprehensive understanding of their relevance to self-worth.

Future Directions

One priority for future work is to explore potential age differences in the associations between domain-specific self-evaluation and self-worth, as the centrality of different domains to global self-worth may shift throughout the life course. For instance, the increasing importance of peer relationships during adolescence may be reflected in a stronger association between peer-relational self-evaluations and self-worth in adolescents, as compared with children (von Soest et al., 2016). Similarly, the decreasing importance of athletic ability during adolescence may be reflected in a weaker association between athletic-ability self-evaluations and self-worth in adolescence, as compared with children (Fredricks & Eccles, 2002). It is also possible that cultural influences on the centrality of different domains to global self-worth become more pronounced with age. While children internalize cultural norms and practices from early development, repeated exposure to such norms and practices may amplify cultural differences in the links between self-evaluations and global self-worth with children they grow older (Legare, 2019). Understanding age differences in the associations between domain-specific self-evaluations and self-worth would provide important insight into the developmental trends of global self-worth across the world.

Another priority is to use research methods (e.g., experience sampling methods) that can help reveal the dynamic moment-by-moment process through which children build their self-worth (Hamaker & Wichers, 2017). How does the salience of self-evaluative domains change over time and from context to context (e.g., do classroom settings make the academic domain more salient, whereas family gatherings make the family domain more salient)? How are self-evaluations within domains triggered by everyday experiences (e.g., praise and criticism)? Do these processes differ across cultures (e.g., are children from cultures higher on individualism more responsive to experiences within agentic domains)? Addressing these questions will shed light on the dynamic nature of children's self-worth and its underpinnings (Crocker & Brummelman, 2018).

Conclusion

This preregistered meta-analysis provides a comprehensive cross-cultural analysis of the associations between children's domain-specific self-evaluations and global self-worth. By focusing on cross-sectional data, our study provides valuable insights into what appears to be a culturally universal pattern of associations between domain-specific self-evaluations and global self-worth. Specifically, our findings highlight the significance of physical appearance self-evaluation as well as the equal centrality of agentic and communal self-evaluations for children's global self-worth. Understanding these associations at the early emergence of global self-worth is crucial for comprehending self-worth development and for designing interventions and support systems that foster healthy self-worth in children.

Authors' Note

This meta-analysis was preregistered at https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=202304.




Acknowledgements

The authors thank Milou Back for her help with data coding and management.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Eddie Brummelman was supported by the Jacobs Foundation (2020-1362-02).

ORCID iDs

Yixin Tang  <https://orcid.org/0000-0003-4621-0110>
 Eddie Brummelman  <https://orcid.org/0000-0001-7695-5135>
 Sheida Novin  <https://orcid.org/0000-0003-3045-1665>

Data Accessibility

The study data and code can be accessed at <https://osf.io/6yegt>.

Supplemental Material

Supplemental material for this article is available online.

References

References marked with asterisks indicate studies provided data in the meta-analysis.

- *Alkhateeb, H. M. (2010). Self-concept in Lebanese and Arab-American pre-adolescents. *Psychological Reports, 106*(2), 435–447. <https://doi.org/10.2466/pr0.106.2.435-447>
- *Arens, A. K., & Hasselhorn, M. (2014). Age and gender differences in the relation between self-concept facets and self-esteem. *Journal of Early Adolescence, 34*(6), 760–791. <https://doi.org/10.1177/0272431613503216>
- *Asendorpf, J. B., & Van Aken, M. A. G. (2003). Personality-relationship transaction in adolescence: Core versus surface personality characteristics. *Journal of Personality, 71*(4), 629–666. <https://doi.org/10.1111/1467-6494.7104005>
- Assink, M., van der Put, C. E., Hoeve, M., de Vries, S. L., Stams, G. J. J., & Oort, F. J. (2015). Risk factors for persistent delinquent behavior among juveniles: A meta-analytic review. *Clinical Psychology Review, 42*, 47–61. <https://doi.org/10.1016/j.cpr.2015.08.002>
- Assink, M., & Wibbelink, C. J. M. (2016). Fitting three-level meta-analytic models in R: A step-by-step tutorial. *The Quantitative Methods for Psychology, 12*(3), 154–174. <https://doi.org/10.20982/tqmp.12.3.p154>
- Bakan, D. (1966). *The duality of human existence: An essay on psychology and religion*. Rand McNally.
- Baranik, L. E., Meade, A. W., Lakey, C. E., Lance, C. E., Hu, C., Hua, W., & Michalos, A. (2008). Examining the differential item functioning of the Rosenberg self-esteem scale across eight countries. *Journal of Applied Social Psychology, 38*(7), 1867–1904. <https://doi.org/10.1111/j.1559-1816.2008.00372.x>
- *Bardid, F., De Meester, A., Tallir, I., Cardon, G., Lenoir, M., & Haerens, L. (2016). Configurations of actual and perceived motor competence among children: Associations with motivation for sports and global self-worth. *Human Movement Science, 50*, 1–9. <https://doi.org/10.1016/j.humov.2016.09.001>
- Barker, E. T., & Bornstein, M. H. (2010). Global self-esteem, appearance satisfaction, and self-reported dieting in early adolescence. *Journal of Early Adolescence, 30*(2), 205–224. <https://doi.org/10.1177/0272431609332936>
- *Barlow, A., & Woods, S. E. (2009). Relationships between self-esteem and smoking experimentation in childhood. *Early Child Development and Care, 179*(4), 529–537. <https://doi.org/10.1080/13619460701269682>
- *Batsiou, S., Bournoudi, S., Antoniou, P., & Tokmakidis, S. P. (2020). Self-perception self-esteem physical activity and sedentary behavior of primary Greek school students: A pilot study. *International Journal of Instruction, 13*(1), 267–278. <https://doi.org/10.29333/iji.2020.13118a>
- *Bear, G. G., Clever, A., & Proctor, W. A. (1991). Self-perceptions of nonhandicapped children and children with learning disabilities in integrated classes. *The Journal of Special Education, 24*(4), 409–426. <https://doi.org/10.1177/002246699102400403>
- *Bear, G. G., Juvonen, J., & McInerney, F. (1993). Self-perceptions and peer relations of boys with and boys without learning disabilities in an integrated setting: A longitudinal study. *Learning Disability Quarterly, 16*(2), 127–136. <https://doi.org/10.2307/1511135>
- Bleidorn, W., Schönbrodt, F., Gebauer, J. E., Rentfrow, P. J., Potter, J., & Gosling, S. D. (2016). To live among like-minded others. *Psychological Science, 27*(3), 419–427. <https://doi.org/10.1177/0956797615627133>
- Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. (2009). *Introduction to meta-analysis*. John Wiley.
- *Boulton, M. J. (2005). Predicting changes in children's self-perceptions from playground social activities and interactions. *British Journal of Developmental Psychology, 23*(2), 209–227. <https://doi.org/10.1348/02615105x26705>
- *Boulton, M. J., Smith, P. K., & Cowie, H. (2010). Short-term longitudinal relationships between children's peer victimization/bullying experiences and self-perceptions. *School Psychology International, 31*(3), 296–311. <https://doi.org/10.1177/0143034310362329>
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. Basic Books.
- Bracken, B. A., Bunch, S., Keith, T. Z., & Keith, P. B. (2000). Child and adolescent multidimensional self-concept: A five-instrument factor analysis. *Psychology in the Schools, 37*(6), 483–493. [https://doi.org/10.1002/1520-6807\(200011\)37:6%3C483::AID-PITS1%3E3.0.CO;2-R](https://doi.org/10.1002/1520-6807(200011)37:6%3C483::AID-PITS1%3E3.0.CO;2-R)
- *Braet, C., Mervielde, I., & Vandereycken, W. (1997). Psychological aspects of childhood obesity: A controlled study in a clinical and nonclinical sample. *Journal of Pediatric Psychology, 22*(1), 59–71. <https://doi.org/10.1093/jpepsy/22.1.59>
- *Brendgen, M., Wanner, B., Vitaro, F., Bukowski, W. M., & Tremblay, R. E. (2007). Verbal abuse by the teacher during childhood and academic, behavioral, and emotional adjustment in young adulthood. *Journal of Educational Psychology, 99*(1), 26–38. <https://doi.org/10.1037/0022-0663.99.1.26>
- *Broc, M. N. (2014). Harter's self-perception profile for children: An adaptation and validation of the Spanish version. *Psychological Reports, 115*(2), 444–466. <https://doi.org/10.2466/08.07.pr0.115c22z5>
- Brown, J. D., Dutton, K. A., & Cook, K. E. (2001). From the top down: Self-esteem and self-evaluation. *Cognition and Emotion, 15*(5), 615–631. <https://doi.org/10.1080/02699930126063>
- Brummelman, E., & Sedikides, C. (2020). Raising children with high self-esteem (but not narcissism). *Child Development Perspectives, 14*(2), 83–89. <https://doi.org/10.1111/cdep.12362>
- *Buist, K. L., & Vermande, M. (2014). Sibling relationship patterns and their associations with child competence and problem behavior. *Journal of Family Psychology, 28*(4), 529–537. <https://doi.org/10.1037/a0036990>

- Butler, R. (2005). Competence assessment, competence, and motivation between early and middle childhood. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 202–221). Guilford.
- Butler, R., & Gasson, S. L. (2005). Self esteem/self concept scales for children and adolescents: A review. *Child and Adolescent Mental Health, 10*(4), 190–201. <https://doi.org/10.1111/j.1475-3588.2005.00368.x>
- *Butler, R., & Marinov-Glassman, D. (1994). The effects of educational placement and grade level on the self-perceptions of low achievers and students with learning disabilities. *Journal of Learning Disabilities, 27*(5), 325–334. <https://doi.org/10.1177/002221949402700509>
- *Byrne, B. M., & Gavin, D. A. W. (1996). The Shavelson model revisited: Testing for the structure of academic self-concept across pre-, early, and late adolescents. *Journal of Educational Psychology, 88*(2), 215–228. <https://doi.org/10.1037/0022-0663.88.2.215>
- *Campbell, F. A., Pungello, E. P., & Miller-Johnson, S. (2002). The development of perceived scholastic competence and global self-worth in African American adolescents from low-income families. *Journal of Adolescent Research, 17*(3), 277–302. <https://doi.org/10.1177/0743558402173004>
- Carpendale, J. I. (2000). Kohlberg and Piaget on stages and moral reasoning. *Developmental Review, 20*(2), 181–205. <https://doi.org/10.1006/drev.1999.0500>
- Carter, E. C., Schönbrodt, F. D., Gervais, W. M., & Hilgard, J. (2019). Correcting for bias in psychology: A comparison of meta-analytic methods. *Advances in Methods and Practices in Psychological Science, 2*(2), 115–144. <https://doi.org/10.1177/2515245919847196>
- *Chan, D. W. (2002). Perceived domain-specific competence and global self-worth of primary students in Hong Kong. *School Psychology International, 23*(3), 355–368. <https://doi.org/10.1177/0143034302023003239>
- *Chan, L. K. S. (1994). Relationship of motivation, strategic learning, and reading achievement in grades 5, 7, and 9. *Journal of Experimental Education, 62*(4), 319–339. <https://doi.org/10.1080/00220973.1994.9944138>
- *Chan, L. K. S. (1996). Motivational orientations and metacognitive abilities of intellectually gifted students. *Gifted Child Quarterly, 40*(4), 184–193. <https://doi.org/10.1177/001698629604000403>
- Chen, F., Zhu, S., & Bi, C. (2017). The development of self-esteem and the role of agency and communion: A longitudinal study among Chinese. *Journal of Child and Family Studies, 27*(3), 816–824. <https://doi.org/10.1007/s10826-017-0942-y>
- Chen, X. (2000). Growing up in a collectivist culture: Socialization and socioemotional development in Chinese children. In A. L. Comunian & U. P. Gielen (Eds.), *International perspectives on human development* (pp. 331–353). Pabst Science.
- *Chen, X., Zappulla, C., Coco, A. L., Schneider, B., Kaspar, V., De Oliveira, A. M., He, Y., Li, D., Li, B., Bergeron, N., Tse, H. C. H., & DeSouza, A. (2004). Self-perceptions of competence in Brazilian, Canadian, Chinese and Italian children: Relations with social and school adjustment. *International Journal of Behavioral Development, 28*(2), 129–138. <https://doi.org/10.1080/01650250344000334>
- *Chung-Hall, J., & Chen, X. (2009). Aggressive and prosocial peer group functioning: Effects on children's social, school, and psychological adjustment. *Social Development, 19*(4), 659–680. <https://doi.org/10.1111/j.1467-9507.2009.00556.x>
- Cimpian, A., Hammond, M. D., Mazza, G., & Corry, G. (2017). Young children's self-concepts include representations of abstract traits and the global self. *Child Development, 88*(6), 1786–1798. <https://doi.org/10.1111/cdev.12925>
- Coburn, K. M., & Vevea, J. L. (2015). Publication bias as a function of study characteristics. *Psychological Methods, 20*(3), 310.
- *Cocks, N., Barton, B., & Donnelly, M. (2009). Self-concept of boys with developmental coordination disorder. *Physical & Occupational Therapy in Pediatrics, 29*(1), 6–22. <https://doi.org/10.1080/01942630802574932>
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155–159.
- Cole, D. A., Maxwell, S. E., Martin, J. M., Peeke, L. G., Seroczynski, A. D., Tram, J. M., Hoffman, K. B., Ruiz, M. D., Jacquez, F., & Maschman, T. (2001). The development of multiple domains of child and adolescent self-concept: A cohort sequential longitudinal design. *Child Development, 72*(6), 1723–1746. <https://doi.org/10.1111/1467-8624.00375>
- Coopersmith, S. (1984). *Coopersmith Self-esteem Inventory*. Consulting Psychologists Press.
- Covington, M. (2009). Self-worth theory: Retrospection and prospects. In K. R. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp. 141–170). Routledge.
- Crocker, J., & Brummelman, E. (2018). The self: Dynamics of persons and their situations. In K. Deaux & M. Snyder (Eds.), *Handbook of personality and social psychology* (2nd ed., pp. 265–287). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190224837.013.11>
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review, 108*(3), 593–623. <https://doi.org/10.1037/0033-295x.108.3.593>
- *Crockett, L. J., Moilanen, K. L., Raffaelli, M., & Randal, B. A. (2006). Psychological profiles and adolescent adjustment: A person-centered approach. *Development and Psychopathology, 18*(1), 195–214. <https://doi.org/10.1017/s0954579406060111>
- Dapp, L. C., Krauss, S., & Orth, U. R. (2023). Testing the bottom-up and top-down models of self-esteem: A meta-analysis of longitudinal studies. *Journal of Personality and Social Psychology, 124*, 1111–1131. <https://doi.org/10.1037/pspp0000444>
- *Davison, K. K., Werder, J. L., Trost, S. G., Baker, B. L., & Birch, L. L. (2007). Why are early maturing girls less active? Links between pubertal development, psychological well-being, and physical activity among girls at ages 11 and 13. *Social Science & Medicine, 64*(12), 2391–2404. <https://doi.org/10.1016/j.socscimed.2007.02.033>
- Dijkstra, P., Kuyper, H., van der Werf, G., Buunk, A. P., & van der Zee, Y. G. (2008). Social comparison in the classroom: A review. *Review of Educational Research, 78*(4), 828–879. <https://doi.org/10.3102/0034654308321210>
- Donnellan, M. B., Trzesniewski, K. H., & Robins, R. W. (2015). Measures of self-esteem. In G. J. Boyle, D. H. Saklofske, & G. Matthews (Eds.), *Measures of personality and social psychological constructs* (pp. 131–157). Elsevier. <https://doi.org/10.1016/B978-0-12-386915-9.00006-1>
- Duval, S., & Tweedie, R. (2000). Trim and fill: A simple funnel-plot-based method of testing and adjusting for publication bias in meta-analysis. *Biometrics, 56*(2), 455–463. <https://doi.org/10.1111/j.0006-341x.2000.00455.x>
- Dweck, C. S. (1998). The development of early self-conceptions: Their relevance for motivational processes. In J. Heckhausen & C. S. Dweck (Eds.), *Motivation and self regulation across the life span* (pp. 257–280). Cambridge University Press.
- Dweck, C. S. (2017). From needs to goals and representations: Foundations for a unified theory of motivation, personality, and development. *Psychological Review, 124*(6), 689–719. <https://doi.org/10.1037/rev0000082>

- *Eapen, V., Naqvi, A., & Al-Dhaheri, A. S. (2000). Cross-cultural validation of Harter's self-perception profile for children in the United Arab Emirates. *Annals of Saudi Medicine*, 20(1), 8–11. <https://doi.org/10.5144/0256-4947.2000.8>
- *Egan, S. K., & Perry, D. G. (1998). Does low self-regard invite victimization? *Developmental Psychology*, 34(2), 299–309. <https://doi.org/10.1037/0012-1649.34.2.299>
- Egger, M., Davey Smith, G., Schneider, M., & Minder, C. (1997). Bias in meta-analysis detected by a simple, graphical test. *The British Medical Journal*, 315(7109), Article 629. <https://doi.org/10.1136/bmj.315.7109.629>
- Erikson, E. (1959). *Childhood and society* (2nd ed.). Norton.
- *Fenzel, L. M. (2000). Prospective study of changes in global self-worth and strain during the transition to middle school. *Journal of Early Adolescence*, 20(1), 93–116. <https://doi.org/10.1177/0272431600020001005>
- *Fordham, K., & Stevenson-Hinde, J. (1999). Shyness, friendship quality, and adjustment during middle childhood. *Journal of Child Psychology and Psychiatry*, 40(5), 757–768. <https://doi.org/10.1111/1469-7610.00491>
- Fredricks, J. A., & Eccles, J. S. (2002). Children's competence and value beliefs from childhood through adolescence: Growth trajectories in two male-sex-typed domains. *Developmental Psychology*, 38(4), 519–533. <https://doi.org/10.1037/0012-1649.38.4.519>
- *Fyfe, M., Raman, A., Sharma, S., Hudes, M. L., & Fleming, S. E. (2011). Insulin resistance and self-perceived scholastic competence in inner-city, overweight and obese, African American children. *Physiology & Behavior*, 102(1), 36–41. <https://doi.org/10.1016/j.physbeh.2010.09.015>
- *Gacek, M., Pilecka, W., & Fusińska-Korpik, A. (2014). Psychometric properties of self-Perception Profile for Children in a Polish sample. *Polish Journal of Applied Psychology*, 12(3), 85–103. <https://doi.org/10.1515/pjap-2015-0016>
- *Gauze, C., Bukowski, W. M., Aquan-Assee, J., & Sippola, L. K. (1996). Interactions between family environment and friendship and associations with self-perceived well-being during early adolescence. *Child Development*, 67(5), 2201. <https://doi.org/10.2307/1131618>
- *Gest, S. D., Domitrovich, C. E., & Welsh, J. A. (2005). Peer academic reputation in elementary school: Associations with changes in self-concept and academic skills. *Journal of Educational Psychology*, 97(3), 337–346. <https://doi.org/10.1037/0022-0663.97.3.337>
- *Granleese, J., & Joseph, S. (1994). Reliability of the Harter Self-Perception Profile for Children and predictors of global self-worth. *The Journal of Genetic Psychology: Research and Theory on Human Development*, 155(4), 487–492. <https://doi.org/10.1080/00221325.1994.9914796>
- *Granleese, J., Trew, K., & Turner, I. (1988). Sex differences in perceived competence. *British Journal of Social Psychology*, 27(2), 181–184. <https://doi.org/10.1111/j.2044-8309.1988.tb00817.x>
- Greenfield, P. M., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology*, 54, 461–490. <https://doi.org/10.1146/annurev.psych.54.101601.145221>
- *Grier, L. K. (2012). Relations between perceived competence, importance ratings, and self-worth among African American school-age children. *Journal of Black Psychology*, 39(1), 3–27. <https://doi.org/10.1177/0095798412447644>
- Gürel, I., Brummelman, E., Sedikides, C., & Overbeek, G. (2020). Better than my past self: Time-sensitive comparison raises children's pride without triggering superiority goals. *Journal of Experimental Psychology: General*, 149(8), 1554–1566. <https://doi.org/10.1037/xge0000733>
- Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., M. Lagos, P. Norris, E. Ponarin, B. Puranen (Eds.) (2022). *World Values Survey Trend File (1981-2022) Cross-National Data-Set. (Data File Version 2.0.0)*. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. <https://doi.org/10.14281/18241.15>
- Hamaker, E. L., & Wichers, M. (2017). No time like the present. *Current Directions in Psychological Science*, 26(1), 10–15. <https://doi.org/10.1177/0963721416666518>
- Hamamura, T. (2012). Are cultures becoming individualistic? A cross-time-sensitive comparison of individualism–collectivism in the United States and Japan. *Personality and Social Psychology Review*, 16(1), 3–24. <https://doi.org/10.1177/1088868311411587>
- Harris, M. A., Donnellan, M. B., Guo, J., McAdams, D. P., Garnier-Villarreal, M., & Trzesniewski, K. H. (2017). Parental co-construction of 5- to 13-year-olds' global self-esteem through reminiscing about past events. *Child Development*, 88(6), 1810–1822. <https://doi.org/10.1111/cdev.12944>
- *Harter, S. (1982). The perceived competence scale for children. *Child Development*, 53(1), 87–97. <https://doi.org/10.2307/1129640>
- Harter, S. (1985). *Manual for the Self-Perception Profile for Children (revision of the perceived competence scale for children)*. University of Denver.
- Harter, S. (2000). Is self-esteem only skin-deep? The inextricable link between physical appearance and self-esteem. *Reclaiming Children and Youth*, 9(3), 135–138.
- Harter, S. (2003). The development of self-representations during childhood and adolescence. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 610–642). Guilford Press.
- Harter, S. (2012a). *The construction of the self: Developmental and sociocultural foundations* (2nd ed.). Guilford.
- Harter, S. (2012b). Emerging self-processes during childhood and adolescence. In M. R. Leary & J. Tangney (Eds.), *Handbook of self and identity* (2nd ed., pp. 680–715). Guilford Press.
- *Harter, S. (2012c). *Self-perception profile for children: Manual and questionnaires*. University of Denver.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Most people are not WEIRD. *Nature*, 466(7302), 29. <https://doi.org/10.1038/466029a>
- *Hess, R. S., & Petersen, S. J. (1996). Reliability and validity of the Self-Perception Profile for Children with Mexican American elementary-age children. *Journal of Psychoeducational Assessment*, 14(3), 229–239. <https://doi.org/10.1177/073428299601400304>
- Hofstede, G. (1980). *Culture's consequences*. Sage.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind* (Rev. and Expanded 3rd ed.). McGraw-Hill.
- *Huisman, M., Oldehinkel, A. J., De Winter, A., Minderaa, R. B., De Bildt, A., Huizink, A. C., Verhulst, F. C., & Ormel, J. (2008). Cohort profile: The Dutch “TRacking adolescents' individual lives' Survey”; TRAILS. *International Journal of Epidemiology*, 37(6), 1227–1235.
- *Hymel, S., LeMare, L., Ditter, E., & Woody, E. Z. (1999). Assessing self-concept in children: Variations across self-concept domains. *Merrill-Palmer Quarterly*, 602–623.
- Isabella, R. A., & Diener, M. L. (2010). Self-representations of social and academic competence: Contextual correlates in middle

- childhood. *Journal of Research in Childhood Education*, 24(4), 315–331. <https://doi.org/10.1080/02568543.2010.510082>
- Jensen, C. D., & Steele, R. G. (2008). Brief report: Body dissatisfaction, weight criticism, and self-reported physical activity in preadolescent children. *Journal of Pediatric Psychology*, 34(8), 822–826. <https://doi.org/10.1093/jpepsy/jsn131>
- Judd, C. M., James-Hawkins, L., Yzerbyt, V., & Kashima, Y. (2005). Fundamental dimensions of social judgment: Understanding the relations between judgments of competence and warmth. *Journal of Personality and Social Psychology*, 89(6), 899–913. <https://doi.org/10.1037/0022-3514.89.6.899>
- Kagitcibasi, C. (2005). Autonomy and relatedness in cultural context: Implications for self and family. *Journal of Cross-cultural Psychology*, 36(4), 403–422. <https://doi.org/10.1177/0022022105275959>
- *Kaminski, P. L., Shafer, M. E., Neumann, C. S., & Ramos, V. (2005). Self-concept in Mexican American girls and boys: Validating the Self-Description Questionnaire-I. *Cultural Diversity and Ethnic Minority Psychology*, 11(4), 321–338. <https://doi.org/10.1037/1099-9809.11.4.321>
- Kashima, Y. (2014). How can you capture cultural dynamics? *Frontiers in Psychology*, 5, Article 995. <https://doi.org/10.3389/fpsyg.2014.00995>
- Keller, H. (2020). Children's socioemotional development across cultures. *Annual Review of Developmental Psychology*, 2, 27–46. <https://doi.org/10.1146/annurev-devpsych-033020-031552>
- Kerns, K. A., & Richardson, R. A. (2008). *Attachment in middle childhood*. Guilford Press.
- *Kistner, J., & Osborne, M. (1987). A longitudinal study of LD children's self-evaluations. *Learning Disability Quarterly*, 10(4), 258–266. <https://doi.org/10.2307/1510599>
- Kwan, V. S. Y., Kuang, L. L., & Hui, N. H. H. (2009). Identifying the sources of self-esteem: The mixed medley of benevolence, merit, and bias. *Self and Identity*, 8(2–3), 176–195. <https://doi.org/10.1080/15298860802504874>
- *Kwok, D. C., & Lytton, H. (1996). Perceptions of mathematics ability versus actual mathematics performance: Canadian and Hong Kong Chinese children. *British Journal of Educational Psychology*, 66(2), 209–222. <https://doi.org/10.1111/j.2044-8279.1996.tb01190.x>
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1–62). Academic Press. [https://doi.org/10.1016/S0065-2601\(00\)80003-9](https://doi.org/10.1016/S0065-2601(00)80003-9)
- Legare, C. H. (2019). The development of cumulative cultural learning. *Annual Review of Developmental Psychology*, 1, 119–147. <https://doi.org/10.1146/annurev-devpsych-121318-084848>
- *Li, A. K. (1988). Self-perception and motivational orientation in gifted children. *Roepers Review*, 10(3), 175–180. <https://doi.org/10.1080/02783198809553121>
- Li, Q., Heyman, G. D., Mei, J., & Lee, K. (2019). Judging a book by its cover: Children's facial trustworthiness as judged by strangers predicts their real-world trustworthiness and peer relationships. *Child Development*, 90(2), 562–575. <https://doi.org/10.1111/cdev.12907>
- *Lindsay, G., Dockrell, J., Letchford, B., & Mackie, C. (2002). Self-esteem of children with specific speech and language difficulties. *Child Language Teaching and Therapy*, 18(2), 125–143. <https://doi.org/10.1191/0265659002ct231oa>
- Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. Sage.
- Magro, S. W., Utesch, T., Dreiskämper, D., & Wagner, J. (2018). Self-esteem development in middle childhood: Support for sociometer theory. *International Journal of Behavioral Development*, 43(2), 118–127. <https://doi.org/10.1177/0165025418802462>
- *Mancini, V., Rigoli, D., Roberts, L., Heritage, B., & Piek, J. (2017). The relationship between motor skills, perceived self-competence, peer problems and internalizing problems in a community sample of children. *Infant and Child Development*, 27(3), 1–16. <https://doi.org/10.1002/icd.2073>
- *Manrique Millones, D. L., Ghesquière, P., & Van Leeuwen, K. (2014). Parenting, socioeconomic status and psychosocial functioning in Peruvian families and their children. *Anales de Psicología*, 30(3), 995–1005. <https://doi.org/10.6018/analesps.30.3.152051>
- *Manrique Millones, D. L., Van Leeuwen, K., & Ghesquière, P. (2013). Associations between psychosocial functioning and academic achievement: The Peruvian case. *Universitas Psychologica*, 12(3), 725–737. <https://doi.org/10.11144/javeriana.upsy12-3.apfa>
- *Marbell, K. N., & Grolnick, W. S. (2012). Correlates of parental control and autonomy support in an interdependent culture: A look at Ghana. *Motivation and Emotion*, 37(1), 79–92. <https://doi.org/10.1007/s11031-012-9289-2>
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253. <https://doi.org/10.1037/0033-295x.98.2.224>
- Marsh, H. W. (1986). Global self-esteem: Its relation to specific facets of self-concept and their importance. *Journal of Personality and Social Psychology*, 51(6), 1224–1236. <https://doi.org/10.1037/0022-3514.51.6.1224>
- *Marsh, H. W. (1987). The factorial invariance of responses by males and females to a multidimensional self-concept instrument: Substantive and methodological issues. *Multivariate Behavioral Research*, 22(4), 457–480. https://doi.org/10.1207/s15327906mbr2204_5
- Marsh, H. W. (1988). *The Self Description Questionnaire (SDQ): A theoretical and empirical basis for the measurement of multiple dimensions of preadolescent self-concept: A test manual and a research monograph*. Psychological Corporation.
- Marsh, H. W. (1990a). Confirmatory factor analysis of multitrait-multimethod data: The construct validation of multidimensional self-concept responses. *Journal of Personality*, 58(4), 661–692. <https://doi.org/10.1111/j.1467-6494.1990.tb00249.x>
- *Marsh, H. W. (1990b). A multidimensional, hierarchical model of self-concept: Theoretical and empirical justification. *Educational Psychology Review*, 2(2), 77–172. <https://doi.org/10.1007/bf01322177>
- Marsh, H. W. (1993). Relations between global and specific domains of self: The importance of individual importance, certainty, and ideals. *Journal of Personality and Social Psychology*, 65(5), 975–992. <https://doi.org/10.1037/0022-3514.65.5.975>
- Marsh, H. W. (2007). *Self-concept theory, measurement and research into practice: The role of self-concept in educational psychology*. British Psychological Society.
- *Marsh, H. W., & Ayotte, V. (2003). Do multiple dimensions of self-concept become more differentiated with age? The differential distinctiveness hypothesis. *Journal of Educational Psychology*, 95(4), 687–706. <https://doi.org/10.1037/0022-0663.95.4.687>
- *Marsh, H. W., & Craven, R. G. (1991). Self-other agreement on multiple dimensions of preadolescent self-concept: Inferences by teachers, mothers, and fathers. *Journal of Educational Psychology*, 83(3), 393–404. <https://doi.org/10.1037/0022-0663.83.3.393>

- Marsh, H. W., Ellis, L. A., & Craven, R. G. (2002). How do preschool children feel about themselves? Unraveling measurement and multidimensional self-concept structure. *Developmental Psychology, 38*(3), 376–393. <https://doi.org/10.1037/0012-1649.38.3.376>
- *Marsh, H. W., & MacDonald-Holmes, I. W. (1990). Multidimensional self-concepts: Construct validation of responses by children. *American Educational Research Journal, 27*(1), 89–117. <https://doi.org/10.3102/00028312027001089>
- Marsh, H. W., Relich, J. D., & Smith, I. D. (1983). Self-concept: The construct validity of interpretations based upon the SDQ. *Journal of Personality and Social Psychology, 45*(1), 173–187. <https://doi.org/10.1037/0022-3514.45.1.173>
- Marsh, H. W., & Shavelson, R. (1985). Self-concept: Its multifaceted, hierarchical structure. *Educational Psychologist, 20*(3), 107–123. https://doi.org/10.1207/s15326985ep2003_1
- *Marsh, H. W., & Smith, I. D. (1987). Cross-national study of the structure and level of multidimensional self-concepts: An application of confirmatory factor analysis. *Australian Journal of Psychology, 39*(1), 61–77. <https://doi.org/10.1080/00049538708259036>
- *Marsh, H. W., Smith, I. D., & Barnes, J. (1984). Multidimensional self-concepts: Relationships with inferred self-concepts and academic achievement. *Australian Journal of Psychology, 36*(3), 367–386. <https://doi.org/10.1080/00049538408255318>
- *Marsh, H. W., Tracey, D. K., & Craven, R. G. (2006). Multidimensional self-concept structure for preadolescents with mild intellectual disabilities. *Educational and Psychological Measurement, 66*(5), 795–818. <https://doi.org/10.1177/0013164405285910>
- *Meadows, E. A., Owen Yeates, K., Rubin, K. H., Taylor, H. G., Bigler, E. D., Dennis, M., Gerhardt, C. A., Vannatta, K., Stancin, T., & Hoskinson, K. R. (2017). Rejection sensitivity as a moderator of psychosocial outcomes following pediatric traumatic brain injury. *Journal of the International Neuropsychological Society, 23*(6), 451–459. <https://doi.org/10.1017/s1355617717000352>
- Mendo-Lázaro, S., Polo-del-Río, M. I., Amado-Alonso, D., Iglesias-Gallego, D., & León-del-Barco, B. (2017). Self-concept in childhood: The role of body image and sport practice. *Frontiers in Psychology, 8*, Article 853. <https://doi.org/10.3389/fpsyg.2017.00853>
- *Messer, S. C., & Beidel, D. C. (1994). Psychosocial correlates of childhood anxiety disorders. *Journal of the American Academy of Child & Adolescent Psychiatry, 33*(7), 975–983. <https://doi.org/10.1097/00004583-199409000-00007>
- *Mishna, F., Khoury-Kassabri, M., Schwan, K., Wiener, J., Craig, W., Beran, T., Pepler, D., & Daciuk, J. (2016). The contribution of social support to children and adolescents' self-perception: The mediating role of bullying victimization. *Children and Youth Services Review, 63*, 120–127. <https://doi.org/10.1016/j.childyouth.2016.02.013>
- *Moritz Rudasill, K., & Callahan, C. M. (2008). Psychometric characteristics of the Harter Self-Perception Profiles for adolescents and children for use with gifted populations. *Gifted Child Quarterly, 52*(1), 70–86. <https://doi.org/10.1177/0016986207311056>
- Morris, M. W., Chiu, C. Y., & Liu, Z. (2015). Polycultural psychology. *Annual Review of Psychology, 66*(1), 631–659. <https://doi.org/10.1146/annurev-psych-010814-015001>
- Muenks, K., Wigfield, A., & Eccles, J. S. (2018). I can do this! The development and calibration of children's expectations for success and competence beliefs. *Developmental Review, 48*, 24–39. <https://doi.org/10.1016/j.dr.2018.04.001>
- *Muldoon, O. T. (2000). Social group membership and self-perceptions in Northern Irish children: A longitudinal study. *British Journal of Developmental Psychology, 18*(1), 65–80. <https://doi.org/10.1348/026151000165571>
- *Muris, P., Meesters, C., & Fijen, P. (2003). The Self-Perception Profile for Children: Further evidence for its factor structure, reliability, and validity. *Personality and Individual Differences, 35*(8), 1791–1802. [https://doi.org/10.1016/s0191-8869\(03\)00004-7](https://doi.org/10.1016/s0191-8869(03)00004-7)
- *Nelis, S., & Bukowski, W. M. (2019). Daily affect and self-esteem in early adolescence: Correlates of mean levels and within-person variability. *Psychologica Belgica, 59*(1), 96–115. <https://doi.org/10.5334/pb.467>
- Nelson, K. (2003). Narrative and self, myth and memory: Emergence of the cultural self. In R. Fivush & C. A. Haden (Eds.), *Autobiographical memory and the construction of a narrative self: Developmental and cultural perspectives* (pp. 3–28). Lawrence Erlbaum.
- Nezlek, J. B., Sorrentino, R. M., Yasunaga, S., Otsubo, Y., Allen, M., Kouhara, S., & Shuper, P. A. (2008). Cross-cultural differences in reactions to daily events as indicators of cross-cultural differences in self-construction and affect. *Journal of Cross-cultural Psychology, 39*(6), 685–702. <https://doi.org/10.1177/0022022108323785>
- Nickerson, A. B., & Nagle, R. J. (2005). Parent and peer attachment in late childhood and early adolescence. *Journal of Early Adolescence, 25*(2), 223–249. <https://doi.org/10.1177/0272431604274174>
- Nielsen, M., Haun, D., Kärtner, J., & Legare, C. H. (2017). The persistent sampling bias in developmental psychology: A call to action. *Journal of Experimental Child Psychology, 162*, 31–38. <https://doi.org/10.1016/j.jecp.2017.04.017>
- *Noordstar, J. J., & Volman, M. (2020). Self-perceptions in children with probable developmental coordination disorder with and without overweight. *Research in Developmental Disabilities, 99*, 103601. <https://doi.org/10.1016/j.ridd.2020.103601>
- Novin, S., Tatar, B., & Krabbendam, L. (2015). Honor and I: Differential relationships between honor and self-esteem in three cultural groups. *Personality and Individual Differences, 86*, 161–163. <https://doi.org/10.1016/j.paid.2015.05.037>
- *Ohanessian, C. M., Lerner, R. M., von Eye, A., & Lerner, J. V. (1996). Direct and indirect relations between perceived parental acceptance, perceptions of the self, and emotional adjustment during early adolescence. *Family and Consumer Sciences Research Journal, 25*(2), 159–183. <https://doi.org/10.1177/1077727x960252004>
- Orth, U., Dapp, L. C., Erol, R. Y., Krauss, S., & Luciano, E. C. (2021). Development of domain-specific self-evaluations: A meta-analysis of longitudinal studies. *Journal of Personality and Social Psychology, 120*(1), 145–172. <https://doi.org/10.1037/pspp0000378>
- Oyserman, D., & Uskul, A. K. (2008). Individualism and collectivism: Societal-level processes with implications for individual-level and society-level outcomes. In F. van de Vijver, D. van Hemert, & Y. Poortinga (Eds.), *Multilevel analysis of individuals and cultures* (pp. 145–173). Lawrence Erlbaum.
- Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2006). Peer relationships, child development,

- and adjustment: A developmental psychopathology perspective. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (pp. 419–493). John Wiley & Sons.
- *Pereda, N., & Forns, M. (2004). Psychometric properties of the Spanish version of the self-perception profile for children. *Perceptual and Motor Skills*, *98*(2), 685–699. <https://doi.org/10.2466/pms.98.2.685-699>
- *Poulsen, A. A., Ziviani, J. M., & Cuskelly, M. (2006). General self-concept and life satisfaction for boys with differing levels of physical coordination: The role of goal orientations and leisure participation. *Human Movement Science*, *25*(6), 839–860. <https://doi.org/10.1016/j.humov.2006.05.003>
- Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J. (2004). Why do people need self-esteem? A theoretical and empirical review. *Psychological Bulletin*, *130*(3), 435–468. <https://doi.org/10.1037/0033-2909.130.3.435>
- R Development Core Team. (2016). *R: A language and environment for statistical computing* (Version 3.3). R Foundation for Statistical Computing. <http://www.R-project.org/>
- *Renick, M. J., & Harter, S. (1989). Impact of social comparisons on the developing self-perceptions of learning disabled students. *Journal of Educational Psychology*, *81*(4), 631–638. <https://doi.org/10.1037/0022-0663.81.4.631>
- Rentzsch, K., & Schröder-Abé, M. (2022). Top down or bottom up? Evidence from the longitudinal development of global and domain-specific self-esteem in adulthood. *Journal of Personality and Social Psychology*, *122*(4), 714–730. <https://doi.org/10.1037/pspp0000393>
- Richards, D., Caldwell, P. H. Y., & Go, H. (2015). Impact of social media on the health of children and young people. *Journal of Paediatrics and Child Health*, *51*(12), 1152–1157. <https://doi.org/10.1111/jpc.13023>
- *Riesen, Y., & Porath, M. (2004). Self-worth and social support of children exposed to marital violence. *Canadian Journal of School Psychology*, *19*(1–2), 75–97. <https://doi.org/10.1177/082957350401900104>
- *Rodd, H. D., Marshman, Z., Porritt, J., Bradbury, J., & Baker, S. R. (2011). Psychosocial predictors of children’s oral health-related quality of life during transition to secondary school. *Quality of Life Research*, *21*(4), 707–716. <https://doi.org/10.1007/s11136-011-9967-7>
- Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, *60*(1), 141–156. <https://doi.org/10.2307/2096350>
- *Rothman, H. R., & Cosden, M. (1995). The relationship between self-perception of a learning disability and achievement, self-concept and social support. *Learning Disability Quarterly*, *18*(3), 203–212. <https://doi.org/10.2307/1511043>
- *Rubin, E. C., Cohen, R., Houston, D. A., & Cockrel, J. (1996). Children’s self-discrepancies and peer relationships. *Social Cognition*, *14*(1), 93–112. <https://doi.org/10.1521/soco.1996.14.1.93>
- *Rubin, K. H., Dwyer, K. M., Booth-LaForce, C., Kim, A. H., Burgess, K. B., & Rose-Krasnor, L. (2004). Attachment, friendship, and psychosocial functioning in early adolescence. *Journal of Early Adolescence*, *24*(4), 326–356. <https://doi.org/10.1177/0272431604268530>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78. <https://doi.org/10.1037/0003-066x.55.1.68>
- Saiphoo, A., & Vahedi, Z. (2019). A meta-analytic review of the relationship between social media use and body image disturbance. *Computers in Human Behavior*, *101*, 259–275. <https://doi.org/10.1016/j.chb.2019.07.028>
- Santos, H. C., Varnum, M. E. W., & Grossmann, I. (2017). Global increases in individualism. *Psychological Science*, *28*(9), 1228–1239. <https://doi.org/10.1177/0956797617700622>
- *Schaffhuser, K., Allemand, M., & Schwarz, B. (2016). The development of self-representations during the transition to early adolescence: The role of gender, puberty, and school transition. *Journal of Early Adolescence*, *37*(6), 774–804. <https://doi.org/10.1177/0272431615624841>
- Schmitt, D. P., & Allik, J. (2005). Simultaneous administration of the Rosenberg self-esteem scale in 53 nations: Exploring the universal and culture-specific features of global self-esteem. *Journal of Personality and Social Psychology*, *89*(4), 623–642. <https://doi.org/10.1037/0022-3514.89.4.623>
- *Schuengel, C., Voorman, J., Stolk, J., Dallmeijer, A., Vermeer, A., & Becher, J. (2006). Self-worth, perceived competence, and behavior problems in children with cerebral palsy. *Disability and Rehabilitation*, *28*(20), 1251–1258. <https://doi.org/10.1080/09638280600554652>
- *Schumann, B. C., Striegel-Moore, R. H., McMahon, R. P., Waclawiw, M. A., Morrison, J. A., & Schreiber, G. B. (1999). Psychometric properties of the self-perception profile for children in a biracial cohort of adolescent girls: The NHLBI Growth and Health Study. *Journal of Personality Assessment*, *73*(2), 260–275. https://doi.org/10.1207/s15327752jpa7302_5
- Sedikides, C., Gaertner, L., & Cai, H. (2015). On the panculturality of self-enhancement and self-protection motivation: The case for the universality of self-esteem. In A. J. Elliot (Ed.), *Advances in motivation science* (pp. 185–241). Elsevier.
- Sedikides, C., Gaertner, L., & Toguchi, Y. (2003). Pancultural self-enhancement. *Journal of Personality and Social Psychology*, *84*(1), 60–79. <https://doi.org/10.1037/0022-3514.84.1.60>
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, *46*(3), 407–441. <https://doi.org/10.3102/00346543046003407>
- *Siffert, A., Schwarz, B., & Stutz, M. (2011). Marital conflict and early adolescents’ self-evaluation: The role of parenting quality and early adolescents’ appraisals. *Journal of Youth and Adolescence*, *41*(6), 749–763. <https://doi.org/10.1007/s10964-011-9703-1>
- Silverman, W. K., Greca, A. M., & Wasserstein, S. (1995). What do children worry about? Worries and their relation to anxiety. *Child Development*, *66*(3), 671–686. <https://doi.org/10.1111/j.1467-8624.1995.tb00897.x>
- Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research*, *29*(3), 240–275. <https://doi.org/10.1177/106939719502900302>
- Slutzky, C. B., & Simpkins, S. D. (2009). The link between children’s sport participation and self-esteem: Exploring the mediating role of sport self-concept. *Psychology of Sport and Exercise*, *10*(3), 381–389. <https://doi.org/10.1016/j.psychsport.2008.09.006>
- *Smith, D. S., & Nagle, R. J. (1995). Self-perceptions and social comparisons among children with LD. *Journal of Learning Disabilities*, *28*(6), 364–371. <https://doi.org/10.1177/002221949502800607>
- *Spence, J. T., & Hall, S. K. (1996). Children’s gender-related self-perceptions, activity preferences, and occupational stereotypes:

- A test of three models of gender constructs. *Sex Roles*, 35(11–12), 659–691. <https://doi.org/10.1007/bf01544086>
- Sroufe, L. A. (2002). From infant attachment to promotion of adolescent autonomy: Prospective, longitudinal data on the role of parents in development. In J. G. Borkowski, S. Landesman Ramey, & M. Bristol-Power (Eds.), *Parenting and the child's world: Influences on academic, intellectual, and social-emotional development* (pp. 187–202). Lawrence Erlbaum.
- Stanley, T. D., & Doucouliagos, H. (2014). Meta-regression approximations to reduce publication selection bias. *Research Synthesis Methods*, 5, 60–78.
- *Stigler, J. W., Smith, S., & Mao, L. W. (1985). The self-perception of competence by Chinese children. *Child Development*, 56(5), 1259. <https://doi.org/10.2307/1130241>
- *Striegel-Moore, R. H., Schreiber, G. B., Pike, K. M., Wilfley, D. E., & Rodin, J. (1995). Drive for thinness in black and white preadolescent girls. *International Journal of Eating Disorders*, 18(1), 59–69.
- Tafarodi, R. W., & Milne, A. B. (2002). Decomposing global self-esteem. *Journal of Personality*, 70(4), 443–484.
- Tafarodi, R. W., & Swann, W. B., Jr. (1995). Self-linking and self-competence as dimensions of global self-esteem: Initial validation of a measure. *Journal of Personality Assessment*, 65(2), 322–342. https://doi.org/10.1207/s15327752jpa6502_8
- Tamis-LeMonda, C. S., Way, N., Hughes, D., Yoshikawa, H., Kalman, R. K., & Niwa, E. Y. (2008). Parents' goals for children: The dynamic coexistence of individualism and collectivism in cultures and individuals. *Social Development*, 17(1), 183–209. <https://doi.org/10.1111/j.1467-9507.2007.00419.x>
- *Tanaka, J. S., & Westerman, M. A. (1988). Common dimensions in the assessment of competence in school-aged girls. *Journal of Educational Psychology*, 80(4), 579–584. <https://doi.org/10.1037/0022-0663.80.4.579>
- Terrin, N., Schmid, C. H., Lau, J., & Olkin, I. (2003). Adjusting for publication bias in the presence of heterogeneity. *Statistics in Medicine*, 22(13), 2113–2126.
- *Theodorakou, K., & Zervas, Y. (2003). The effects of the creative movement teaching method and the traditional teaching method on elementary school children's self-esteem. *Sport, Education and Society*, 8(1), 91–104. <https://doi.org/10.1080/1357332032000050088>
- Thomaes, S., Brummelman, E., & Sedikides, C. (2017). Why most children think well of themselves. *Child Development*, 88(6), 1873–1884. <https://doi.org/10.1111/cdev.12937>
- Thomaes, S., Reijntjes, A., Orobio De Castro, B., Bushman, B. J., Poorthuis, A., & Telch, M. J. (2010). I like me if you like me: On the interpersonal modulation and regulation of preadolescents' state self-esteem. *Child Development*, 81(3), 811–825. <https://doi.org/10.1111/j.1467-8624.2010.01435.x>
- Tomasello, M. (2016). Cultural learning redux. *Child Development*, 87(3), 643–653. <https://doi.org/10.1111/cdev.12499>
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, 96(3), 506–520. <https://doi.org/10.1037/0033-295X.96.3.506>
- van Assen, M. A. L. M., van Aert, R. C. M., & Wicherts, J. M. (2015). Meta-analysis using effect size distributions of only statistically significant studies. *Psychological Methods*, 20, 293–309.
- Van den Noortgate, W., & Onghena, P. (2003). Hierarchical linear models for the quantitative integration of effect sizes in single-case research. *Behavior Research Methods, Instruments, & Computers*, 35(1), 1–10. <https://doi.org/10.3758/bf03195492>
- *Van Dongen-Melman, J. E. W. M., Koot, H. M., & Verhulst, F. C. (1993). Cross-cultural validation of Harter's Self-Perception Profile for Children in a Dutch Sample. *Educational and Psychological Measurement*, 53(3), 739–753. <https://doi.org/10.1177/0013164493053003018>
- *Varni, J. W., Katz, E. R., Colegrove, R., & Dolgin, M. (1995). Perceived physical appearance and adjustment of children with newly diagnosed cancer: A path analytic model. *Journal of Behavioral Medicine*, 18(3), 261–278. <https://doi.org/10.1007/bf01857873>
- *Vedul-Kjelsås, V., Sigmundsson, H., Stensdotter, A. K., & Haga, M. (2011). The relationship between motor competence, physical fitness and self-perception in children. *Child: Care, Health and Development*, 38(3), 394–402. <https://doi.org/10.1111/j.1365-2214.2011.01275.x>
- *Verschuere, K., Buyck, P., & Marcoen, A. (2001). Self-representations and socioemotional competence in young children: A 3-year longitudinal study. *Developmental Psychology*, 37(1), 126–134. <https://doi.org/10.1037/0012-1649.37.1.126>
- *Vervoort, E., Bosmans, G., Doumen, S., Minnis, H., & Verschuere, K. (2014). Perceptions of self, significant others, and teacher-child relationships in indiscriminately friendly children. *Research in Developmental Disabilities*, 35(11), 2802–2811. <https://doi.org/10.1016/j.ridd.2014.07.004>
- Viechtbauer, W. (2005). Bias and efficiency of meta-analytic variance estimators in the random-effects model. *Journal of Educational and Behavioral Statistics*, 30(3), 261–293. <https://doi.org/10.3102/10769986030003261>
- Viechtbauer, W. (2010). Conducting meta-analyses in R with the metafor package. *Journal of Statistical Software*, 36, 1–48. <http://dx.doi.org/10.18637/jss.v036.i03>
- Viechtbauer, W. (2015). *Meta-analysis package for R*. <https://cran.r-project.org/web/packages/metafor/metafor.pdf>
- Viechtbauer, W., & Cheung, M. W. L. (2010). Outlier and influence diagnostics for meta-analysis. *Research Synthesis Methods*, 1, 112–125. <https://doi.org/10.1002/jrsm.11>
- Vignoles, V. L., Owe, E., Becker, M., Smith, P. B., Easterbrook, M. J., Brown, R., González, R., Didier, N., Carrasco, D., Cadena, M. P., Lay, S., Schwartz, S. J., Des Rosiers, S. E., Villamar, J. A., Gavreliuc, A., Zinkeng, M., Kreuzbauer, R., Baume, P., Martin, M., . . . Bond, M. H. (2016). Beyond the “east-west” dichotomy: Global variation in cultural models of selfhood. *Journal of Experimental Psychology: General*, 145(8), 966–1000. <https://doi.org/10.1037/xge0000175>
- von Soest, T., Wichstrøm, L., & Kvaalem, I. L. (2016). The development of global and domain-specific self-esteem from age 13 to 31. *Journal of Personality and Social Psychology*, 110(4), 592–608. <https://doi.org/10.1037/pspp0000060>
- Wagner, J., Lüdtke, O., Robitzsch, A., Göllner, R., & Trautwein, U. (2018). Self-esteem development in the school context: The roles of intrapersonal and interpersonal social predictors. *Journal of Personality*, 86(3), 481–497. <https://doi.org/10.1111/jopy.12330>
- Wang, Q. (2004). The emergence of cultural self-constructs: Autobiographical memory and self-description in European American and Chinese children. *Developmental Psychology*, 40, 3–15. <https://doi.org/10.1037/0012-1649.40.1.3>
- *Waschull, S. B., & Kernis, M. H. (1996). Level and stability of self-esteem as predictors of children's intrinsic motivation and reasons for anger. *Personality and Social*

- Psychology Bulletin*, 22(1), 4–13. <https://doi.org/10.1177/0146167296221001>
- *Windle, M., Hooker, K., Lerner, K., East, P. L., Lerner, J. V., & Lerner, R. M. (1986). Temperament, perceived competence, and depression in early and late adolescents. *Developmental Psychology*, 22(3), 384–392. <https://doi.org/10.1037/0012-1649.22.3.384>
- *Wu, Y., & Smith, D. E. (1997). Self-esteem of Taiwanese children. *Child Study Journal*, 27(1), 1–19.
- Yang, Q., Tian, L., Huebner, E. S., & Zhu, X. (2019). Relations among academic achievement, self-esteem, and subjective well-being in school among elementary school students: A longitudinal mediation model. *School Psychology*, 34(3), 328–340. <https://doi.org/10.1037/spq0000>
- *Yu, L., & Xie, D. (2009). Multidimensional gender identity and psychological adjustment in middle childhood: A study in China. *Sex Roles*, 62(1–2), 100–113. <https://doi.org/10.1007/s11199-009-9709-2>