



# The Role of Descriptive and Non-Specific Outcome-Oriented Praise in Child Self-Esteem: A Multiphase, Multimethod Investigation

Jean-Michel Robichaud<sup>1</sup> · Fanny Grenier<sup>2</sup> · Mireille Joussemet<sup>2</sup> · Geneviève A. Mageau<sup>2</sup>

Accepted: 15 September 2022

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2022

## Abstract

Praise may have different effects on child self-esteem, depending on its informational and evaluative value. In this multiphase, multimethod investigation, we assessed the interplaying role of two outcome-oriented praises that differed in their informational and evaluative value (i.e., descriptive and non-specific praise) on indicators of child self-esteem. In phase 1 77 mothers reported on their usage of descriptive and non-specific praise, while their child ( $M = 10.09$  years old) reported on their level of self-esteem. In phase 2, a subsample of 43 children completed an experimental art task during which an experimenter offered either descriptive or non-specific praise. Children then rated their competence at that task. Results from phase 1 showed that mother usage of descriptive and non-specific praise interacted to predict child self-esteem. Specifically, the relation between descriptive praise and child self-esteem was positive (vs. non-significant) when mothers used moderate to high (vs. low) amounts of non-specific praise. Furthermore, the relation between non-specific praise and child self-esteem was negative (vs. non-significant) when mothers used low (vs. moderate to high) levels of descriptive praise. Results from phase 2 showed that differences between descriptive and non-specific praise conditions emerged on child perceived competence for children reporting lower (but not higher) global self-esteem. Specifically, children with lower global self-esteem rated themselves as more competent when given descriptive (rather than non-specific) praise. Results underlie the relevance of including descriptive elements when offering outcome-oriented praise to children. They also advance the field by identifying different ways to offer outcome-oriented praise.

**Keywords** Child self-esteem · Descriptive praise · Non-specific praise · Outcome-oriented praise · Parenting · Praise

## Highlights

- Compared to non-specific praise, descriptive praise is believed to be more informational.
- Descriptive praise is positively linked to child self-esteem when mothers combine it with non-specific praise.
- Non-specific praise is negatively linked to child self-esteem when mothers don't combine it with descriptive praise.
- Children with lower (vs. higher) global self-esteem respond better (vs. similarly) to descriptive praise, compared to non-specific praise.

These authors contributed equally: Jean-Michel Robichaud, Fanny Grenier

The Fond de recherche du Québec – Société et Culture (FRQSC) and the Social Sciences and Humanities Research Council of Canada (SSHRC) funded and facilitated this research through a grant to the last author and doctoral scholarships to the two first authors.

**Supplementary information** The online version contains supplementary material available at <https://doi.org/10.1007/s10826-022-02449-0>.

✉ Jean-Michel Robichaud  
jean-michel.robichaud@umoncton.ca

✉ Geneviève A. Mageau  
g.mageau@umontreal.ca

Praise is a powerful tool widely believed to promote a broad range of positive outcomes in children. As such, praise is often used by adults to enhance child self-esteem and general psychosocial functioning. However, empirical evidence suggests that effects of praise on children are not systematically positive. Indeed, depending on its content, praise may elicit both desirable and detrimental child outcomes

<sup>1</sup> École de psychologie, Université de Moncton, Moncton, NB, Canada

<sup>2</sup> Département de psychologie, Université de Montréal, Montréal, QC, Canada

(e.g., Soenens and Vansteenkiste, 2020). Research also suggests that the detrimental effects of praise are particularly likely to appear with more vulnerable children (e.g., children with low self-esteem; Brummelman et al., 2014). Given the popularity of praise and its double-edged sword feature, it is crucial to identify the types of praise that should be favored as well as the characteristics that may explain their advantages over other types of praise.

## Praise

Praise may be defined as enthusiastic communications that inform recipients that they behaved in a way likely to suit the expectations of their social group. Within adult-child interactions, praise may be conceptualized as a two-step procedure. First, the adult notices and positively evaluates an information presented by, or related to, the child (e.g., a behavior, outcome, or trait). Second, the adult verbalizes the result of that evaluation to the child.

According to research, adult praise (e.g., offered by parents, teachers, experimenters) meaningfully impacts child psychosocial functioning (for overviews, see Dweck, 2007; Hattie & Timperley, 2007; Henderlong & Lepper, 2002; Soenens & Vansteenkiste, 2020). Of particular importance to the present investigation, praise affects child self-esteem. Child self-esteem may be defined as the extent to which children value themselves. Self-esteem can be measured from a global perspective (e.g., assessing child overall sense of self-worth; Kernis, 2005), but also from a situational perspective (e.g., assessing child perceived competence on a given task after completing it; Lam et al., 2008). Child self-esteem is an important determinant of child psychosocial functioning; higher child self-esteem is intimately tied to a number of key developmental outcomes, including better mental health (Sowislo & Orth, 2013), higher resilience to stress (Rector & Roger, 1997), higher levels of well-being (e.g., higher levels of happiness and life satisfaction, Baiocco et al., 2018), more prosocial behaviors (Fu et al., 2017), overall better interpersonal outcomes (Cameron & Granger, 2019) and higher school performance (though for a critical review, see Baumeister et al., 2003). As such and particularly in Western countries where interventions aiming to foster child self-esteem are widely implemented since the 1970s, low child self-esteem is commonly seen by adults as a pervasive and worrisome problem that needs to be addressed (Brummelman et al., 2017). Coherently, programs aiming to improve self-esteem typically include adult praise as one of their main components (O'Mara et al., 2006).

Research has revealed that the effects of praise on child self-esteem depend on both the praise's content and the praised child's characteristics (e.g., Brummelman et al.,

2016; 2017). Focusing on praise content, praise can be grouped in three broad categories based on what is being evaluated, namely: (1) process-oriented praise (i.e., praise that targets efforts and behaviors; e.g., "You must have worked hard!"), (2) person-oriented praise (i.e., praise that targets personal traits and characteristics; e.g., "You are a genius!") and (3) outcome-oriented praise (i.e., praise that targets achievements; e.g., "You did well!"). Process and person praise have been repeatedly found to have positive and negative effects on child self-esteem, respectively (e.g., Mueller & Dweck, 1998). Outcome-oriented praise, on the other hand, has been shown to affect child self-esteem in rather inconsistent ways (e.g., Kamins & Dweck, 1999; Morris & Zentall, 2014). Given the mixed evidence regarding outcome praise, we aim to identify characteristics that could account for its benefits and drawbacks. To do so, we turn to Self-Determination Theory, a theoretical framework that has identified primary features of praise that could influence its impact.

## A Self-Determination Theory Perspective on Praise

Writings anchored in Self-Determination Theory (SDT) suggest that the impact of outcome-oriented praise should vary according to the salience of its informational and evaluative value (Ryan, 1982; Soenens & Vansteenkiste, 2020). The informational value of praise refers to the extent to which it contains enthusiastic and specific descriptions regarding what is being acclaimed (e.g., You shared your new toys with your friends with a big smile on your face!). SDT proposes that high informational value is beneficial to child self-esteem because it provides children with positive information about their strengths and areas for growth, thereby enhancing their confidence in their ability to cope successfully with various challenges (Deci et al., 1987). In line with this proposition, humanistic writings consistent with SDT have proposed that high informational value may facilitate children's understanding of the reasons for which they are being praised and as such promote autonomous positive self-evaluation (Faber & Mazlish, 2000). Thus, based on SDT, one may expect that outcome-oriented praise can enhance child self-esteem when it is informational.

In contrast, the evaluative value of praise refers to the extent to which it highlights how the acclaimed output suits given standards or expectations. Adults increase the evaluative value of outcome-oriented praise when they include judgments based on absolute and objectively framed standards (e.g., What you did is absolutely right!; This is fantastic!) or by using terms that explicitly state whether expectations or standards have been met (e.g., Great! You behaved just like you *should* have!; Soenens & Vansteenkiste, 2020).

To some extent, the evaluative aspect of praise may be beneficial to child self-esteem. For instance, including an evaluative component to praise may help children understand that they have reached a certain level of competence, which could, in turn, boost their situational sense of self-worth. However, SDT warns that highly evaluative praise poses the risk of being experienced as a source of pressure to behave, feel, or think in accordance with benchmarks that are external to children's sense of self (Soenens & Vansteenkiste, 2020). When experienced as such, children may in turn tie their self-esteem to their aptitude to meet praised standards and expectations, thereby increasing their vulnerability in the face of failures or setbacks (Kamins & Dweck, 1999). Coherently, after experiencing failure, children tend to evaluate themselves better if they had previously received outcome-oriented praise that had not evaluated specific elements but, instead, had been non-specific (e.g., "Awesome!"; Morris & Zentall, 2014).

In sum, based on these theoretical propositions and empirical evidence, one could expect that outcome-oriented praise requires high informational value and minimal evaluative value to be efficacious. Consequently, in addition to minimizing the evaluative component of outcome-oriented praise as non-specific praise does (Morris & Zentall, 2014), it may also be important to maximize its informational component (which non-specific praise does not do). One type of outcome-oriented praise argued to combine low evaluative value and high informational value is called *descriptive* praise (Faber & Mazlish, 2000). Descriptive praise is hypothesized to be preferable to non-specific praise in theoretical writings, but its impact has yet to be directly investigated.

## Descriptive Praise

Descriptive praise refers to enthusiastic communications that describe the observable behaviors that elicited a positive reaction (e.g., All your books are stored on the bookshelf and your toys in their box!) or that share positive subjective experiences or feelings (e.g., It's a pleasure to walk into this room!), but without referring to any external standards (Faber & Mazlish, 2000). Though also low on the evaluative component, descriptive praise is nonetheless more informational than non-specific praise as it provides explicit information about the positive features that led to a favorable assessment.

Descriptive praise resembles other types of praise whose content is also high in informational value and low in evaluative value, namely process-oriented praise and behavior-specific praise (Kamins & Dweck, 1999; Royer et al., 2019). Indeed, all three forms of praise are highly similar in that they focus on describing observable child

behaviors and avoid evaluative comments. However, the two latter forms of praise differ from descriptive praise in that (1) they also describe child efforts (e.g., You must have *worked hard* to achieve this!) rather than solely the outcome (e.g., All your homework is completed! I saw you tackling each subject one after the other even when they were hard!) and (2) they do not describe adults' subjective experiences or feelings.

Thus, though research has yet to examine the link between descriptive praise and child self-esteem, indirect empirical evidence examining process-oriented praise and behavior-specific praise suggests that children should benefit from this type of feedback. For instance, several studies conducted in school settings have shown that, when compared to different praise types (including non-specific praise), behavior-specific praise tends to yield better academic and behavioral student outcomes, including enhanced task engagement, better academic grades, fewer inappropriate behaviors and improved classroom climate (for a review, see Royer et al., 2019). Research on process-oriented praise has also found that, compared with children who receive more evaluative forms of feedback (e.g., person-oriented praise), children receiving process-oriented praise (1) seek more challenging tasks and if they fail, (2) persist longer, (3) maintain their self-esteem, (4) and, especially for those with lower self-esteem, do not feel as ashamed for having failed (e.g., Brummelman et al., 2014; Mueller & Dweck, 1998).

## Child Self-Esteem as a Moderator

In addition to being differently impacted by praise depending on its content, children also respond differently to praise depending on their personal characteristics. Of particular importance to this study, child self-esteem seems to influence how children respond to different types of praise, with low self-esteem children being more sensitive to praise's content than high self-esteem children. Indeed, a recent series of experimental and longitudinal studies has shown that children with initial low self-esteem, but not those with initial high self-esteem, tend to experience a decrease of self-esteem following parental usage of more evaluative forms of praise (Brummelman et al., 2014; 2016; 2017). To better understand the situational effects of outcome-oriented praise on children, it thus also seems relevant to consider child global self-esteem level.

## Present Study

The overarching goal of the present research was to examine the role of descriptive praise in child self-esteem.

To do so, we conducted a multiphase, multimethod investigation in which we contrasted descriptive praise with a more typical form of outcome-oriented praise, namely non-specific praise. In phase 1, we used a multi-informant cross-sectional design to test the relations between child self-reported global self-esteem and mother self-reported usage of descriptive and non-specific outcome-oriented praise. Given the argued higher informational value of descriptive praise compared to non-specific praise (paired with its low evaluative value), we expected that descriptive praise would be positively associated with child global self-esteem, even when controlling for non-specific praise. We did not have a specific hypothesis regarding the relation between child global self-esteem and non-specific outcome-oriented praise, given that results from past research on outcome-oriented praise have been inconsistent. We also tested the interaction effect between these two types of feedback to assess whether the different features of each praise type could complement one another and influence their relation with child self-esteem. Given the lack of research on this topic, our hypotheses regarding the interaction effect were rather tentative. First, in line with the idea that higher informational value should positively affect child self-esteem, we expected that the relation between non-specific praise and child self-esteem would increase when children also receive more (vs. less) descriptive praise (Soenens & Vansteenkiste, 2020). Further, based on the idea that praise may be detrimental to child self-esteem if its evaluative value is more salient, we also considered the possibility that the positive relation between descriptive praise and child self-esteem would be less pronounced when parents give more (vs. less) non-specific praise.

In the second phase of our study, we directly compared the effects of descriptive praise and non-specific praise on child self-esteem. To do so, we asked children to participate in an experimental task during which an experimenter offered either descriptive or non-specific outcome-oriented praise and assessed a situational indicator of child self-esteem, namely child perceived competence at the task. We chose child perceived competence for our situational indicator of child self-esteem because past studies have shown that it is intimately related to child global sense of self-worth (e.g., Proctor & Choi, 1994) and because it is often used as an indicator of self-esteem in studies assessing the situational effects of praise (e.g., Brummelman et al., 2014). We hypothesized that descriptive praise would be generally more effective to promote children's perceptions of their competence than non-specific praise. We also expected that children reporting lower global self-esteem would be more influenced by praise content compared to children reporting higher global self-esteem, as past research suggests that they are more sensitive to praise's content (Brummelman et al., 2014; 2016; 2017).

## Phase 1: Cross-Sectional Survey

### Method

#### Participants

We recruited 77 Canadian French-speaking mother-child dyads in elementary schools and other community-based organizations. Children were aged between 8 and 12 years old ( $M = 10.09$ ,  $SD = 1.00$ ; 51.52% girls) and their mothers were aged between 30 and 51 years old ( $M = 40.38$ ,  $SD = 4.97$ ). Members of all dyads completed a cross-sectional questionnaire.

When asked about their ethnicity of origin, most mothers reported being either Canadian (42.62%) or Caucasian (22.95%); the remainder declared being born in France (6.56%) or in one of 14 other countries (3.28% or less per country). Most mothers reported French, the language in which this study was conducted, as their mother tongue (79.22%). Other mothers reported English (6.49%), Arabic (5.19%) or another language (less than 2.60% of the sample) as their mother tongue. Overall, our sample's socioeconomic status was high. In terms of parental education, approximately two thirds of mothers (68.00%) had a university diploma, another near third (29.33%) had another post-secondary diploma and the remaining mothers (2.67%) had completed high school. Furthermore, 45.07% of mothers reported family annual income of at least 90000 CAN\$, 39.43% reported a familial income between 50000 and 89999 CAN\$, 11.27% earned between 30000 CAN\$ and 49999 CAN\$, and only 4.23% earned between 10000 CAN\$ and 29999 CAN\$.

#### Procedure

Prior to conducting our research, we obtained ethical approval from the ethical committees of our university as well as official approvals from participating school boards and community-based organizations. We informed mothers about our research by email. We then sent a consent form to mother-child dyads interested in participating in our study. Given that only one child per family could participate, mothers were asked to invite their child who was closest to 9 years old. To thank our participants, we gave children a 15 CAN\$ library gift card.

Mothers filled out their questionnaire at home. This questionnaire, which was administered as part of a broader parenting study, asked mothers to report on (1) the extent to which they generally gave descriptive and non-specific praise to their participating child, (2) socio-demographic information and (3) their participating child's interest in art activities (which was used in phase 2 as a randomization check). Once mothers had completed

**Table 1** Factor Loadings of the Exploratory Factor Analysis on the Parental Praise Scale

Items	Loadings	
	Descriptive praise	Non-specific praise
<i>When my child behaves well or does something correctly...</i>		
I mention what I felt (e.g., You're helping me with the dishes made my task easier and more pleasant)	<b>-0.82</b>	-0.03
I describe his/her behaviors and summarize what I have seen (e.g., I see that you have already done your homework; this is what I call autonomy!)	<b>-0.77</b>	0.14
I describe the emotions that I experienced (e.g., I feel fortunate that you're sharing candy with me)	<b>-0.73</b>	-0.1
I mention what I see (e.g., I see many sentences written without any mistake)	<b>-0.72</b>	0.2
I compliment him/her on what s/he did (e.g., This is pretty!)	0.09	<b>0.92</b>
I tell him/her that what s/he did was really good (e.g., What you did was great!)	0.02	<b>0.72</b>
I burst out an enthusiastic exclamation in response to his/her achievement (e.g., Wow! Super!)	-0.04	<b>0.71</b>
I find a word that summarizes what s/he has done (e.g., Your work is excellent!)	-0.16	<b>0.61</b>
Eigen value	4.18	1.45

Loadings in bold indicate that this item may be considered as part of the associated factor

their questionnaire, we asked participating schools and organizations to inform participating children that an experimenter (i.e., the second author) would soon meet with them. Apart from three home visits, the experimenter met children at their participating school or organization. In all cases, children were met individually in an undecorated room to minimize distractions. The experimenter reminded children of the study's objectives and procedures before asking them if they still wanted to participate (all children gave their verbal consent). Children then completed a questionnaire assessing their global self-esteem (and other measures that were part of the larger parenting study).

## Measures

**Mother reports of their general usage of descriptive and non-specific praise** To assess mothers' general tendency to give descriptive and non-specific outcome-oriented praise to their participating child, we developed the *Parental Praise Scale*. In this 8-item scale, mothers indicate the frequency with which they give both praise types "when their child behaves well or does something correctly", using a 7-point response scale (1 = *Almost never* to 7 = *Almost always*). Each praise type is assessed with 4 items. As shown in Table 1, exploratory factor analysis conducted on the sample of mothers participating in this study shows that the scale has a two-factor structure, with descriptive and non-specific praise items each loading clearly on their respective factor (all loadings  $\geq 0.61$ ; all cross loadings  $\leq 0.20$ ). The reliability coefficients of the non-specific ( $\alpha = 0.83$ ) and descriptive ( $\alpha = 0.86$ ) praise

subscales were also satisfactory, suggesting good psychometric properties for this scale.

**Child reports of their global self-esteem** Children reported on their global self-esteem using the French version of *Rosenberg's Self-Esteem Scale* (Vallières & Vallerand, 1990). This validated 5-item instrument assesses the extent to which children have a positive attitude towards themselves. Specifically, children read five statements (e.g., "I think that I have many nice qualities") and indicate the extent to which each one is true for them, using a 4-point response scale (1 = *Not true at all for me* to 4 = *Very true for me*). In the present study, the reliability coefficient of this scale was satisfactory ( $\alpha = 0.74$ ).

## Plan of Analyses

Prior to conducting our main analyses, we estimated missing values for all datasets (i.e., data used in phase 1 [ $N = 77$ ] and 2 [ $N = 43$ ]). To do so, we used multiple imputations with the EM estimator and created 20 data sets, which we then aggregated into a single one (for more information on missing data, see supplemental material online). We then verified that our imputed continuous variables were normally distributed (i.e., skewness  $< |2|$ , kurtosis  $< |7|$ ; Curran et al., 1996).

Afterward, we looked at the descriptive statistics of mother usage of descriptive and non-specific praises and tested whether mothers used one type more frequently than the other (*paired t-test*). We then examined the correlations between our variables of interest. To maximize statistical power, we only intended to include sociodemographic

variables that were significantly related to child global self-esteem in our main analyses.

For our main analyses, we examined the interplaying relation between descriptive praise, non-specific praise and child global self-esteem. To do so, we performed a hierarchical multiple regression. In a first step, we entered mother self-reported usage of the two types of praise as well as any relevant sociodemographic covariate. In a second step, we entered the interaction term between descriptive and non-specific praise. Provided that a significant interaction occurred between the two praise variables, we intended to examine the relation between descriptive praise and child global self-esteem at three different levels of non-specific praise: low (one *SD* below average), moderate (average) and high (one *SD* above average). Furthermore, we intended to explore the relation between non-specific praise and child global self-esteem at the same three levels of descriptive praise.

## Results

### Preliminary Analyses

Looking at the normality of our data (after imputation) revealed that all continuous variables could be considered normally distributed (skewness  $\leq |1.31|$ , kurtoses  $\leq |2.19|$ ). We thus proceeded with our analyses without transforming any variable. Table 2 presents descriptive information on mother usage of descriptive and non-specific praise as well as on the other variables used in phase 1. On average, mothers reported giving descriptive praise “relatively often” (i.e., approximately 5 on a 7-point scale) and giving non-specific praise “often” (i.e., approximately 6 on a 7-point scale). Comparing these two means showed that mothers reported giving significantly more non-specific praise to their children than descriptive praise,  $t(76) = 7.35, p < 0.001$ .

Table 2 also presents the correlations between our variables of interest. Results first revealed a positive relation between descriptive and non-specific maternal praise, suggesting that some mothers tend to give more praise than others, regardless of the type of praise. Contrary to our hypotheses, we observed no significant correlation between praise variables and child global self-esteem. Concerning sociodemographic variables, only child sex significantly correlated with child global self-esteem, with boys reporting higher global self-esteem than girls. We thus included child sex as a covariate in our main analyses.

### Main Analyses

Entering as a first step both praise variables as well as child sex in our regression model significantly predicted child global self-esteem,  $F(3, 73) = 2.97, p = 0.037, R^2 = 0.11$ .

However, contrary to expectations, only child sex was significantly associated with child global self-esteem,  $\beta = -0.29, p = 0.010$ . Indeed, neither descriptive,  $\beta = 0.20, p = 0.116$ , nor non-specific praise,  $\beta = -0.15, p = 0.238$ , was significantly related to this outcome variable.

Entering as a second step the interaction term between the two types of praise significantly increased the predictive value of our regression model of child global self-esteem,  $\Delta F(1, 72) = 5.27, p = 0.025, \Delta R^2 = 0.06$ . As shown in Fig. 1, unpacking this interaction revealed that when mothers reported giving moderate to high amounts of non-specific praise, the relation between descriptive praise and child global self-esteem was positive, both  $\beta s \geq 0.26$ , both  $p s \leq 0.043$ . In contrast, when mothers reported giving low amounts of non-specific praise, the relation between descriptive praise and child global self-esteem was non-significant,  $p = 0.907$ . As also shown in Fig. 1, further examining simple effects revealed that when mothers used moderate to high amounts of descriptive praise, the relation between non-specific praise and child global self-esteem was non-significant, both  $p s \geq 0.264$ . In contrast, when mothers reported using low amounts of descriptive praise, the relation between non-specific praise and child global self-esteem was negative,  $\beta = -0.39, p = 0.019$ .

## Phase 2: Experimental Study

### Method

#### Participants

Participants for this second experimental phase were a subsample of 43 children who participated in phase 1. Specifically, out of the 77 children participating in phase 1, 165 children also accepted to take part in our experimental study. We randomly assigned these children to one of three praise conditions, one of which was outside the scope of the present study ( $n = 22$ ) and was thus excluded from our analyses. Examining differences between the subsample of 43 children included in phase 2 and the remaining participating children who were only included in phase 1 revealed no difference on any predictor or outcome variable, all  $p s \geq 0.161$ . Concerning sociodemographic variables, we found only one marginal and thus non-significant difference, all other  $p s \geq 0.333$ . Specifically, families whose children were included in phase 2 had a marginally lower annual income than those solely included in phase 1,  $p = 0.060$ .

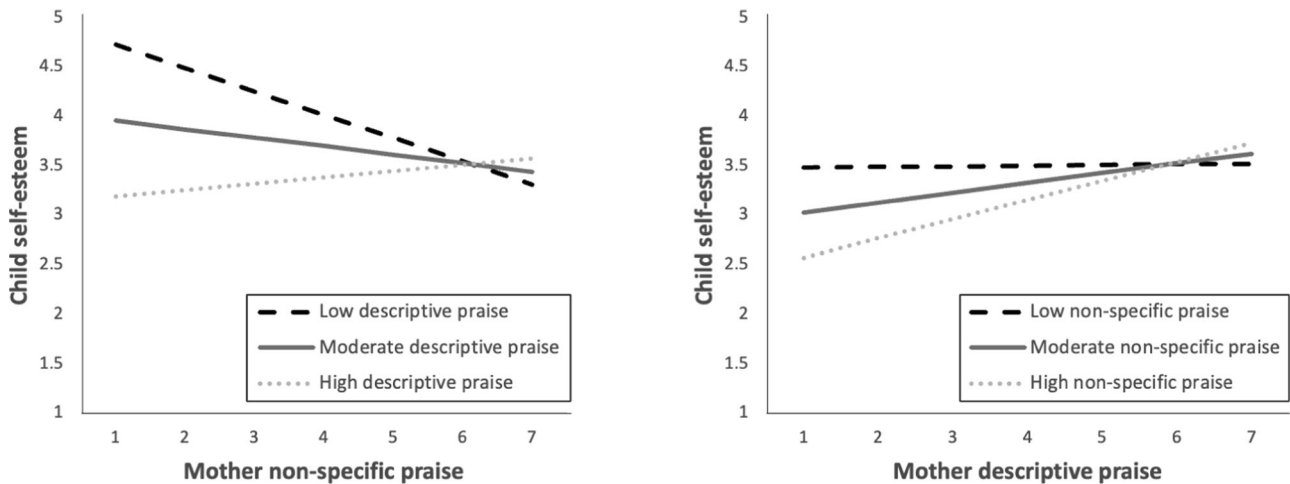
#### Procedure

**Experimental Task** Children took part in the experimental task during the same meeting with the experimenter as the one

**Table 2** Means (Standard Deviations) and Correlations among Variables from Phase 1

	Mean (SD)	1	2	3	4	5	6	7
1. Maternal descriptive praise	5.14 (1.33)							
2. Maternal non-specific praise	6.11 (0.82)	0.51*						
3. Child global self-esteem	3.33 (0.50)	0.12	-0.02					
4. Child sex (0 = boy; 1=girl)	0.55 (0.50)	0.02	-0.10	-0.28*				
5. Child age	10.09 (0.99)	0.09	0.09	-0.05	0.03			
6. Maternal age	40.38 (4.97)	0.08	-0.03	-0.06	-0.33*	0.34*		
7. Maternal education	8.14 (2.17)	-0.10	-0.24*	-0.02	0.06	-0.03	0.11	
8. Family income	5.75 (1.32)	0.02	-0.11	0.20	-0.07	0.05	-0.07	0.05

\* $p < 0.05$



**Fig. 1** Child Global Self-Esteem as Predicted by the Interplay between Mother Usage of Descriptive and Non-Specific Praise. *Note.* Each slope represents the relation between one type of praise and child global self-esteem at low, moderate, or high levels of the other praise type. Standardized betas with an asterisk are significant at  $p < 0.05$

for phase 1. The experimental task consisted of decorating an empty haunted house, printed on a 12×18-inch sheet of paper. This art activity was chosen because it was novel to children, creative and sufficiently complex to allow interactions with the experimenter and opportunities for the experimenter to praise the child. Children had 15 min to decorate their haunted house. They were offered art material (i.e., markers, scissors and glue) as well as pictures of objects and creatures found in haunted houses (e.g., ghosts, vampires, spider webs). The experimenter informed children that they could use the material to create their own haunted house, for instance by cutting and pasting pictures on their paper or use them as sources of inspiration to create whatever they could imagine. All children received the same prewritten verbal instructions.

During the task’s first 5 min, the experimenter remained silent so that children could begin their artwork and familiarize themselves with the provided material. After that period and until the end of the task, the experimenter provided predetermined outcome-oriented praise to children about their work and did so at predetermined regular time intervals (see Experimental manipulation section for more details). Once the 15 min period was over, children

stopped their artwork and completed a short questionnaire in which they reported on how competent they felt while doing the task.

**Experimental Manipulation** We randomly assigned children to one of two experimental conditions. In the *descriptive praise* condition ( $n = 21$ ; 12 girls), the experimenter gave descriptive praise (high informational value) and as such focused on (1) specific observable elements (e.g., I see that you put a [spider web] which will make visitors nervous!) and (2) specific subjective appreciations of children’s craft activity (e.g., I think the visitors will be quite frightened!). In the *non-specific praise* condition ( $n = 22$ ; 12 girls), the experimenter gave non-specific praise and as such focused on evaluating the child outcome with limited informational value (e.g., What you’re doing is really cool!). Assigning children to these two conditions allowed to compare the impact of descriptive and non-specific praise on child self-esteem. To enhance the validity of our experimental manipulation, we developed the verbatim for each praise condition based on examples provided by theoretical writings on descriptive and non-specific

**Table 3** Back-to-Back Translated Verbatim and Praises Ordering in Each Condition

Condition	Time	Praise
Descriptive	5m00s	This [X] is particularly frightening!
	7m00s	I see that you put a [X], which will make visitors nervous and also a [Y], which will make visitors jump in that room!
	9m00s	I think the visitors will be quite frightened.
	11m00s	You put many things in your haunted house: You put [X], [Y] and [Z]. This is what I call having imagination!
	13m00s	You started with the most important (like [X]) and then you added different details such as [Y] and [Z].
	15m00s	It's over! Your artwork gives me many ideas! I'm excited to decorate my house!
Non-specific	5m00s	WOW! This is starting very well. I think it's really pretty.
	6m15s	Good job! I think that your haunted house will be very pretty.
	7m30s	The more the outline of your haunted house is taking shape, the more I find it impressive.
	8m45s	What you're doing is super cool!
	10m00s	I love your haunted house. It is really magnificent!
	11m15s	This really is the good way to make the outline of a haunted house!
	12m30s	This is so pretty!
	13m45s	The outline of your haunted house is really well done. I find it perfect.
	15m00s	It's over! The result of the outline of your haunted house is incredible! It really is very pretty.

praise (e.g., Faber and Mazlish, 2000). Table 3 presents the English back-to-back translation of the verbatim and praises ordering in each condition.

To further enhance the validity of our experimental manipulation, we ensured that our conditions were equivalent on potential confounds. First, we evaluated relevant experimenter's behaviors towards children (e.g., authenticity level) and compared them between conditions to ensure their equivalence (see the Experimental Study Measures section for more details on the coding). Second, we predetermined praise statements so that each condition would have the same number of words (i.e., 94 words). This was a conservative approach as it resulted in children in the descriptive condition receiving less instances of praise than those in the non-specific condition, thereby potentially creating a disadvantage for the descriptive condition. Indeed, given that descriptive praise tends to require more words than non-specific praise, children in the descriptive praise condition received feedback every 120 s (for a total of 6 instances of praise), whereas children in the non-specific praise condition received feedback every 75 s (for a total of 9 instances of praise). Nonetheless, it ensured that any observed advantage for the descriptive condition could not be explained by the total number of words nor by a greater amount of praise.

## Measures

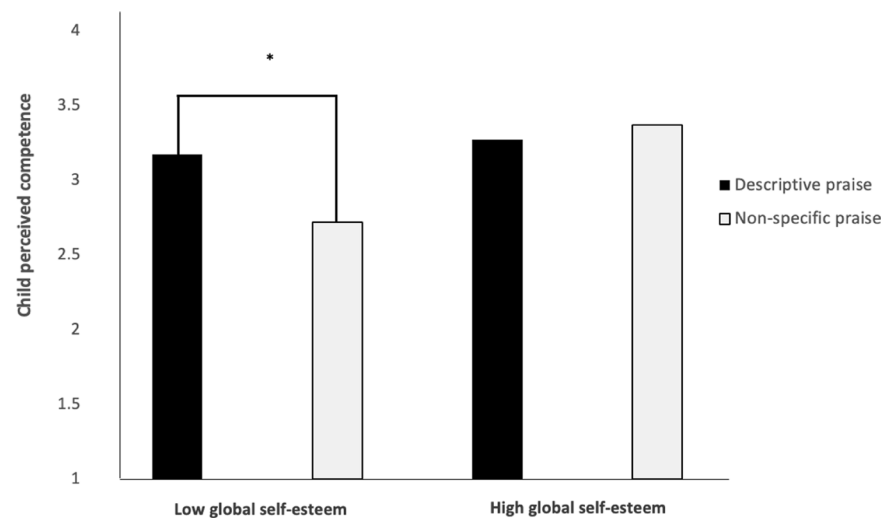
**Child Perceived Competence** After the experimental task, children reported on their perceived competence at the task using the French version of the *School Skills* subscale of the

*Self-Perception Profile for Children Scale* (SPPC; Harter, 1982), which was adapted to our experimental setting. This 6-item subscale uses what is referred to as a "structure alternative format" (Harter, 1982). Specifically, each item presents two opposite statements regarding child competence at the task (sample item: Some children thought that they were very good at the activity BUT Other children wondered whether they were able to do the activity). For each item, children first choose which of the two opposing statement they identify the most with. Afterward, children indicate whether the chosen statement represents them "a little bit" or "completely". This results in a 4-point response scale, where a higher score indicates higher perceived competence at the task. The French version of this subscale has been validated with elementary school children and has demonstrated good internal consistency ( $\alpha$  ranging from 0.74 to 0.84; Boivin et al., 1992). Looking at the psychometric properties of our subscale's situational adaptation revealed a problematic item that meaningfully impaired the subscale's internal consistency. Removing this item resulted in a more acceptable reliability coefficient ( $\alpha = 0.63$ , instead of 0.53). We thus kept this 5-item version of the subscale for our analyses.

**Experimenter Coded Behaviors (Covariate)** The experimenter's behaviors were coded using an adapted version of Savard et al., (2013)'s procedure. Specifically, an independent observer blind to our research hypotheses used a 7-point scale (1 = *Not at all* to 7 = *Extremely*) to code the extent to which the experimenter (1) was patient with the



**Fig. 2** Effects of Descriptive and Non-Specific Outcome-Oriented Praise on Child Situational Perceptions of Competence, as Moderated by Child Global Self-Esteem. *Note.* Pairs of bars illustrate the effect of the two praise types on child perceived competence at low and high level of child global self-esteem. Asterisks indicate a significant difference between the two praise types at  $p < 0.05$



child throughout the interaction (e.g., avoided sighing or rolling her eyes), (2) interacted with the child in an authentic way (e.g., used a tone of voice that was concordant with her words), and (3) paid attention to what the child was doing when completing the experimental task (e.g., looked towards the child while s/he was completing the task).

The observer coded the three experimenter's behaviors at three different times when applicable: (a) during instructions (i.e., the 5 min period prior to the experimental task), (b) during the task's first 5 min (i.e., when the experiment was silent) and (c) during the task (i.e., the 10 min during which the experimenter was praising). Thus, patience was coded at all measurement times, authenticity was coded when the experimenter was interacting with children (a & c) and attention was coded when children were engaged in the task (b & c). An average score across measurement times was then calculated for all behaviors, thereby yielding an overall appreciation of the experimenter's behaviors during the task.

**Child Interest in Art Activities (Covariate)** As a potential confound, we measured child interest in art activities. To prevent biases in child perceptions of (and self-evaluation with respect to) the experimental task, we asked mothers to provide this information. Mothers indicated the extent to which their participating children "liked doing art activities", using a 4-point response scale (1 = *Not at all* to 4 = *Very much*).

### Plan of Analyses

For our preliminary analyses, all variables used in phase 1 (i.e., mother usage of descriptive and non-specific praise, child global self-esteem and sociodemographics), child interest in art activities and the experimenters' coded

behaviors during the experimental task were compared across conditions to ascertain the successful randomization of our participants on potential confounds. We compared conditions using a MANOVA followed (if significant) by ANOVAs. Provided that differences between conditions on given variables were detected, we intended to include these variables as covariates in our main analyses.

For our main analyses, we examined the effect of the experimental manipulation on child perceptions of their own competence using an ANCOVA that included any identified confounded variables as covariates. We also assessed the potential moderating role of child global self-esteem (as reported in phase 1). Provided that child global self-esteem moderated the effect of our manipulation, we intended to unpack this interaction at one standard deviation above and below child average global self-esteem.

## Results

### Randomization Check

The MANOVA revealed no difference between the two experimental conditions at the multivariate levels on all potential covariates, Wilks'  $\Lambda=0.77$ ,  $F_{\text{exact}}(11, 31)=0.85$ ,  $p=0.591$ . We thus conducted our main analyses without including any covariate in our model.

### Main Analyses

Figure 2 presents the results of our experimental study's main analyses. Overall, child perceived competence was not differently influenced by the two praise conditions,  $p=0.146$ . Yet, as expected, there was a significant interaction between child global self-esteem and our experimental manipulation,  $F(1, 39)=4.15$ ,  $p=0.048$ ,

$\eta_p^2 = 0.10$ , suggesting that children differentially reacted to the different types of outcome-oriented praise depending on their global self-esteem. Unpacking this interaction showed that among children with a higher global self-esteem, receiving one type of praise or another did not significantly impact their sense of competence,  $p = 0.610$ . In contrast, among children with a generally lower self-esteem, those who received descriptive praise ( $M = 3.17$ ,  $SD = 0.51$ ) reported feeling more competent at the task they had just completed, compared to the ones who received non-specific praise ( $M = 2.72$ ,  $SD = 0.46$ ),  $p = 0.022$ .

## Discussion

In this multiphase, multimethod study, we aimed to extend the literature on praise by examining the role of descriptive praise in child self-esteem. In a first, cross-sectional phase, we examined whether mother reports of their global usage of descriptive (high informational) and non-specific (low informational) praise were associated with their child global self-esteem. In a second, experimental phase, an experimenter offered either descriptive or non-specific praise to children during an art task, thereby allowing us to compare the effects of both praise types on child perceived competence at that task. Based on Brummelman et al. (2014; 2016; 2017)'s findings, we also considered the moderating role of child global self-esteem.

### Phase 1: Maternal Descriptive and Non-Specific Praise and Child Global Self-esteem

Results of phase 1 offered some evidence of a positive relation between descriptive praise and child global self-esteem. Indeed, although mother self-reported usage of descriptive praise was not significantly related to child global self-esteem on its own, it nonetheless interacted with non-specific praise to predict self-esteem. More specifically, we found the presence of a positive (vs. non-significant) relation between descriptive praise and child self-esteem for dyads in which mothers reported using moderate to high amounts of non-specific praise. Thus, based on our results, it seems as though the benefits of highly informational praise on child self-esteem may be conditional to complementary usage of non-specific praise. As such, one may argue that child self-esteem is enhanced only when descriptive praise is offered by someone who is also generous in non-specific positive and enthusiastic comments (e.g., "Good job!"). Indeed, such non-specific praise may help children correctly interpret parent descriptive praise as positive and authentically enthusiastic.

Results of phase 1 can also be interpreted by focusing on the relation between non-specific praise and child global

self-esteem as moderated by descriptive praise. Among dyads in which mothers rarely offered descriptive praise, mother usage of non-specific praise was negatively associated with their child's self-esteem. This negative link was absent among dyads in which mothers tended to use descriptive praise however; the extent to which they gave non-specific praise was simply not associated with child self-esteem. Thus, when adults offer non-specific praise, including descriptive elements may help mitigate its potentially deleterious effect.

Finally, data analyses conducted for phase 1 offered insights into mothers' relative usage of descriptive and non-specific praise. Our results showed that mothers tended to offer non-specific praise more often than descriptive praise (though it is worth noting that mothers of our sample reported giving both praise types often). Correlations indeed showed that mothers who used descriptive praise more often also tended to give more non-specific praise, implying that some mothers give overall higher amounts of outcome-oriented praise than others. Yet, the fact that each type of praise was only associated with child global self-esteem at certain levels of the other type of praise suggests that the overall quality of outcome-oriented praise may be a better determinant of child self-esteem than its overall amount.

Overall, our results partly supported our hypotheses based on SDT's claim that praise characterized by high informational value is preferable (Sonens & Vansteenkiste, 2020). Given the correlational nature of this first phase however, we cannot affirm any causal relation between praise and self-esteem. It is indeed possible to interpret our results as an indication that child self-esteem level influences the way parents praise their children (i.e., by using different combinations of descriptive and non-specific praise). In contrast, results from the second, experimental phase of our study offer support to the idea that child self-esteem is indeed affected by praise.

### Phase 2: Situational descriptive and non-specific praise as predictors of child situational self-esteem

Results from phase 2 first revealed no significant main effect of praise type on child perceived competence, suggesting (contrary to our hypotheses) that adult situational usage of descriptive and non-specific praise does not, on average, differentially affect child situational self-esteem. However, coherently with our hypotheses and with past findings suggesting that children with low self-esteem are more sensitive to the type of praise they receive than children with high self-esteem (e.g., Brummelman et al., 2014; 2016; 2017), moderation analyses showed that children with low, but not high, global self-esteem responded differently to descriptive and non-specific praise. Specifically, children with lower self-esteem who received descriptive

praise felt more competent in making their haunted house, compared to those who received non-specific praise.

Interpreting these results through the lens of SDT, we argue that the greater informational value of descriptive praise may have helped children understand the reasons why they were being praised, thereby increasing their aptitude to make an autonomous positive self-evaluation. In contrast, situational non-specific praise may have been too vague for children to grasp what it was that they had done well, integrate it to their sense of self and feel competent to a similar extent. Obtaining these findings with an experimental design supports the idea that praise may influence child sense of competence during task completion. They do not however rule out the possibility of a bidirectional relation between praise and child self-esteem, where child subjective sense of self-worth (and objective competence) also affect the type of praise parents offer. Given that child competence is positively associated with the way parents interact with them, one may rather expect such bidirectional associations to exist (e.g., Robichaud et al., 2019).

Results from both phases of our study highlight the relevance of using outcome-oriented praise with high informational value (descriptive praise) to promote child sense of competence and self-esteem. At a global level, such descriptive may be beneficial to child self-esteem if parents are also generously using enthusiastic non-specific praise. At a situational level, descriptive praise may enhance low self-esteem child sense of competence to a greater extent than non-specific praise. This last finding is particularly noteworthy given that low self-esteem children can be more likely to benefit from adult interventions to nurture their self-esteem and psychological well-being (e.g., Brummelman et al., 2014).

### Limitations and Future Research Directions

Though the present research has strengths that increase our confidence in its findings (e.g., multi-informant and multi-method design), some limitations should nonetheless be considered. First, we used a convenience sample, such that selection biases could exist. In our study, participants primarily reported an European American cultural heritage and had a rather high socioeconomic status; the results may thus not apply to the entire population. Relatedly, recruitment issues paired with time-related constraints resulted in a small sample size, which may have limited the power to detect smaller effects. One resource-efficient way to address statistical power issues in future studies would be to use a repeated-measure experimental design, where children complete two tasks and receive each praise type. Using this approach would also allow to examine how receiving certain praise types may amplify or dampen children's subsequent appreciation of other types of praise.

Second, we solely examined outcome-oriented descriptive and non-specific praise, thereby limiting the information we could extract on outcome-oriented praise's role in child self-esteem. For instance, in phase 1, we did not ask mothers how frequently they generally used outcome-oriented praise, thereby preventing us from controlling for the quantity of outcome-oriented praise or other forms of praise. In phase 2, we could only assess the *relative* impact of descriptive and non-specific praise on child perceived competence as we did not include a no-praise condition. Thus, though descriptive praise may be more beneficial than non-specific praise, it is unclear whether one or both are preferable than not praising children at all. To address this limitation, future studies could use a diary design where children would report their daily interactions with their parents and their reactions to different forms of praise (or lack thereof).

Third, our praise items were specifically developed for our study and thus were not previously validated. Although reliability seemed high, results could have been influenced by undetected psychometric issues. Relatedly, though there are theoretical arguments supporting the idea that descriptive praise is higher in informational value than non-specific praise, we did not empirically test this potential explanatory mechanism. Future research including child reports of praise characteristics could investigate whether different praise types significantly differ in their informational and evaluative value and whether such differences mediate the relation between praise types and child self-esteem.

Somewhat related to the aforementioned limit, we did not consider the effects that other praise characteristics may have on child self-esteem (e.g., perceived levels of intensity/excessiveness), thereby leaving unknown their potential role in the observed results. For instance, in phase 1, the survey items assessing non-specific praise did not differentiate between low and high intensity non-specific praise. As a result, we cannot rule out the possibility that the observed results stemmed from the fact that mothers who indicate offering this type of praise to greater extents do so excessively. In phase 2 however, the experimenter was coded by an independent observer as similarly authentic in both experimental conditions, thereby offering some indirect reassurance that non-specific praise was not perceived as more excessive than descriptive praise (Henderson and Lepper, 2002). Nonetheless, it remains possible that the experimental wording of non-specific praise in phase 2 (e.g., Super! Excellent!) still came across as excessive for some children, which could have played a role in the observed relative detrimental effects of this praise type. To avoid potential contamination effects in future studies, researchers should measure and control for additional praise characteristics.

It is also worth noting that the adults praising children were not the same in the two phases of the study. In phase 1, we assessed maternal praise. In phase 2, we assessed experimenter praise. It is thus not clear whether the results obtained in phase 2 may be applied to the parent-child relationship and vice versa. For instance, one may argue that the stronger mother-child bond renders children more sensitive to the quality of maternal praise, such that greater differences would have been observed in phase 2 had mothers been the ones giving the praise. Yet, one could also argue that interacting with a stranger creates a novelty effect where children cannot rely on existing knowledge of past social interactions and thus become more attentive and sensitive to feedback. Though such possibilities cannot be discarded based on our findings, empirical evidence suggests that children's responses to different types of praise are similar regardless of the informant. For example, children respond more positively to praise characterized by higher informational value (e.g., process-oriented praise) than praise characterized by higher evaluative value (e.g., person-oriented praise), regardless of whether the praise is offered by their parent (e.g., Pomerantz & Kempner, 2013), an experimenter (e.g., Mueller & Dweck, 1998), a teacher (e.g., Skipper & Douglas, 2012), or a computer (e.g., Brummelman et al., 2014).

Future studies aiming to better understand the role of descriptive praise could examine its impact on other child outcomes shown to be related to praise (e.g., child motivation and persistence). Such studies could also examine whether the effects of descriptive praise persist in time. For instance, research suggests that praise can have a delayed effect on children (e.g., by influencing their level of persistence in a subsequent task when they encounter failure; Mueller & Dweck, 1998). Longitudinal research also suggests that parental praise can predict child self-esteem later in time (Brummelman et al., 2017). Examining whether such findings hold with descriptive praise would be relevant as it would shed light on the different ways through which this praise type may affect children. Finally, other studies could examine factors that determine adult usage of descriptive and non-specific praise. Based on SDT research suggesting that more autonomy-supportive adults tend to favor strategies that are more informational than evaluative, one could hypothesize that adults with a more favorable attitude towards autonomy support would be inclined to use descriptive praise more often (Joussemet et al., 2008).

**Author Contributions** J.M.R. analyzed the data and wrote the paper. F.G. designed the study, collected the data and collaborated with the writing of the paper. M.J. collaborated with the writing of the paper. G.A.M. collaborated with the design of the study, data analyses and writing of the paper.

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare no competing interests.

**Ethics** (*Blinded for reviews*)'s ethic committee provided approval for this study.

**Informed Consent** Participants gave their informed consent prior to their participation.

## References

- Baiocco, R., Verrastro, V., Fontanesi, L., Ferrara, M. P., & Pistella, J. (2018). The contributions of self-esteem, loneliness and friendship to children's happiness: The roles of gender and age. *Child Indicators Research*, *12*, 1413–1433. <https://doi.org/10.1007/s12187-018-9595-7>.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, *4*, 1–44. <https://doi.org/10.1111/1529-1006.01431>.
- Boivin, M., Vitaro, F., & Gagnon, C. (1992). A Reassessment of the Self-Perception Profile for Children: Factor Structure Reliability and Convergent Validity of a French Version among Second through Sixth Grade Children. *International Journal of Behavioral Development*, *15*(2), 275–290. <https://doi.org/10.1177/016502549201500207>.
- Brummelman, E., Crocker, J., & Bushman, B. J. (2016). The Praise Paradox: When and Why Praise Backfires in Children With Low Self-Esteem. *Child Development Perspectives*, *10*, 111–115. <https://doi.org/10.1111/cdep.12171>.
- Brummelman, E., Nelemans, S. A., Thomaes, S., & Orobio de Castro, B. (2017). When parents' praise inflates, children's self-esteem deflates. *Child Development*, *88*, 1799–1809. <https://doi.org/10.1111/cdev.12936>.
- Brummelman, E., Thomaes, S., Orobio de Castro, B., Overbeek, G., & Bushman, B. J. (2014). "That's not just beautiful-That's incredibly beautiful!": The adverse impact of inflated praise on children with low self-esteem. *Psychological Science*, *25*, 728–735. <https://doi.org/10.1177/0956797613514251>.
- Cameron, J. J., & Granger, S. (2019). Does self-esteem have an interpersonal imprint beyond self-reports? A meta-analysis of self-esteem and objective interpersonal indicators. *Personality and Social Psychology Review*, *23*, 73–102. <https://doi.org/10.1177/1088868318756532>.
- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, *1*, 16–29. <https://doi.org/10.1037/1082-989X.1.1.16>.
- Deci, E. L., Ryan, & Richard, M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology*, *1*(53), 1024–1037. <https://doi.org/10.1037/0022-3514.53.6.1024>.
- Dweck, C. S. (2007). The perils and promises of praise. *Educational Leadership*, *65*, 34–39. <https://doi.org/10.1080/00131727609336497>.
- Faber, A., & Mazlish, E. (2000). *How to talk so kids will listen & listen so kids will talk*. New York: Perennial Currents. <https://doi.org/10.1017/CBO9781107415324.004>.
- Fu, X., Padilla-Walker, L. M., & Brown, M. N. (2017). Longitudinal relations between adolescents' self-esteem and prosocial behavior toward strangers, friends and family. *Journal of Adolescence*, *57*, 90–98. <https://doi.org/10.1016/j.adolescence.2017.04.002>.

- Harter, S. (1982). The perceived competence scale for children. *Child Development*, 53, 87–97. <https://doi.org/10.1037/t05704-000>.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77, 81–112. <https://doi.org/10.3102/003465430298487>.
- Henderlong, J., & Lepper, M. R. (2002). The effects of praise on children's intrinsic motivation: A review and synthesis. *Psychological Bulletin*, 128, 774–795. <https://doi.org/10.1037/0033-2909.128.5.774>.
- Joussemet, M., Landry, R., & Koestner, R. (2008). A self-determination theory perspective on parenting. *Canadian Psychology*, 49, 194–200. <https://doi.org/10.1037/a0012754>.
- Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: implications for contingent self-worth and coping. *Developmental Psychology*, 35, 835–847. <https://doi.org/10.1037/0012-1649.35.3.835>.
- Kernis, M. H. (2005). Measuring self-esteem in context: The importance of stability of self-esteem in psychological functioning. *Journal of Personality*, 73, 1569–1605. <https://doi.org/10.1111/j.1467-6494.2005.00359.x>.
- Lam, S. F., Yim, P. S., & Ng, Y. L. (2008). Is effort praise motivational? The role of beliefs in the effort-ability relationship. *Contemporary Educational Psychology*, 33, 694–710. <https://doi.org/10.1016/j.cedpsych.2008.01.005>.
- Morris, B. J., & Zentall, S. R. (2014). High fives motivate: The effects of gestural and ambiguous verbal praise on motivation. *Frontiers in Psychology*, 5, 1–6. <https://doi.org/10.3389/fpsyg.2014.00928>.
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology*, 75(1), 33–52. <https://doi.org/10.1037/0022-3514.75.1.33>.
- O'Mara, A. J., Marsh, H. W., Craven, R. G., & Debus, R. L. (2006). Do self-concept interventions make a difference? A synergistic blend of construct validation and meta-analysis. *Educational Psychologist*, 41, 181–206. [https://doi.org/10.1207/s15326985Sep4103\\_4](https://doi.org/10.1207/s15326985Sep4103_4).
- Pomerantz, E. M., & Kempner, S. G. (2013). Mothers' daily person and process praise: Implications for children's theory of intelligence and motivation. *Developmental Psychology*, 49(11), 2040–2046. <https://doi.org/10.1037/a0031840>.
- Proctor, T. B., & Choi, H. (1994). Effects of transition from elementary school to junior high school on early adolescents' self-esteem and perceived competence. *Psychology in the Schools*, 31, 319–329. [https://doi.org/10.1002/1520-6807\(199410\)31:43.0.CO;2-3](https://doi.org/10.1002/1520-6807(199410)31:43.0.CO;2-3).
- Rector, N. A., & Roger, D. (1997). The stress buffering effects of self-esteem. *Personality and Individual Differences*, 23, 799–808. [https://doi.org/10.1016/S0191-8869\(97\)00095-0](https://doi.org/10.1016/S0191-8869(97)00095-0).
- Robichaud, J.-M., Bureau, J. S., Ranger, F., & Mageau, G. A. (2019). The relation between children's task-specific competence and mothers' controlling practices. *Social Development*, 28(1), 120–135. <https://doi.org/10.1111/sode.12331>.
- Royer, D. J., Lane, K. L., Dunlap, K. D., & Ennis, R. P. (2019). A systematic review of teacher-delivered behavior-specific praise on K–12 student performance. *Remedial and Special Education*, 40, 112–128. <https://doi.org/10.1177/0741932517751054>.
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43, 450. <https://doi.org/10.1037/0022-3514.43.3.450>.
- Savard, A., Joussemet, M., Emond Pelletier, J., & Mageau, G. A. (2013). The benefits of autonomy support for adolescents with severe emotional and behavioral problems. *Motivation and Emotion*, 37, 688–700. <https://doi.org/10.1007/s11031-013-9351-8>.
- Skipper, Y., & Douglas, K. (2012). Is no praise good praise? Effects of positive feedback on children's and university students' responses to subsequent failures. *British Journal of Educational Psychology*, 82(2), 327–339. <https://doi.org/10.1111/j.2044-8279.2011.02028.x>.
- Soenens, B., & Vansteenkiste, M. (2020). Understanding the complexity of praise through the lens of self-determination theory (pp. 27–35). <https://doi.org/10.4324/9780429327667-5>
- Sowislo, J. F., & Orth, U. (2013). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, 139, 213–240. <https://doi.org/10.1037/a0028931>.
- Vallieres, E. F., & Vallerand, R. J. (1990). Traduction et validation canadienne-française de l'échelle de l'estime de soi de Rosenberg. *International Journal of Psychology*, 25, 305–316. <https://doi.org/10.1080/00207599008247865>.

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.