

A Meta-analysis of the Relations Between Socioeconomic Status and Parenting Practices

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Abstract

The question of why parents parent the way they do is central in parenting studies. Research about the predictors of parenting has been guided by Belsky's classical model of parenting determinants. In this model, socioeconomic status was not explicitly considered as a determinant of parenting. However, there is ample research that came later that found relations between socioeconomic status and parenting. The aim of this study was to find an aggregate estimate of the relations between socioeconomic status and parenting practices using meta-analytic methods. We found that socioeconomic status was positively linked to positive parenting, and negatively linked to negative parenting. In particular, socioeconomic status was positively linked to parental warmth and parental behavioral control, but negatively linked to parental psychological control. The relations between socioeconomic status and positive or negative parenting were not moderated by child's age or sex and did not differ based on the type of socioeconomic status indicator. Moreover, all the correlations were small in magnitude, and were comparable to other predictors of parenting such as parent's depression, parent's personality traits, and child's temperament. Our results suggest that parent's overall socioeconomic status, or its different constituents, supplement Belsky's model of parenting determinants.

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Data Availability Statement included at the end of the article

Keywords

Parenting, child rearing, socioeconomic status, child development, family studies

It is well-established that parenting practices are associated with an array of child outcomes, such as academic achievement (e.g., [Joshi et al., 2003](#); [Pinquart, 2016](#)), self-esteem (e.g., [Martínez et al., 2007](#); [Pinquart & Gerke, 2019](#)), problematic behavior ([Kılıçkaya et al., 2023](#); [Lim & You, 2019](#); [Zhang & Wang, 2022](#)), and psychopathology (e.g., [Pinquart, 2017](#); [Yap & Jorm, 2015](#)). Therefore, the question of why parents parent the way they do is central to parenting studies. Research about the predictors of parenting has been guided by Belsky's process model of parenting determinants ([Belsky, 1984](#); [Belsky et al., 2007](#)). In this model, Belsky proposed three categories of parenting determinants. The first category is parent's characteristics, which include factors such as parent's personality traits, parent's depression, and parent's developmental history. The second category is child's characteristics, such as child's temperament. The third category is the family's broad social context. In this category, Belsky listed the family's social networks, the parent's quality of marital relationship, and the parent's work experiences as part of the broad social context. Interestingly, [Taraban and Shaw \(2018\)](#) noted in a recent review of Belsky's model that parent's socioeconomic status - which is traditionally defined as an individual or household's standing in the social hierarchy based on the resources, power, and influence that they possess ([Hill & Witherspoon, 2011](#); [Mueller & Parcel, 1981](#); [Willms, 2003](#)) - was not *explicitly* considered in the model.

Although the parent's overall socioeconomic status was not explicitly listed as a determinant of parenting in Belsky's model, there is ample research that came later which examined the relations between socioeconomic status and parenting. Disparities in various aspects of parenting across the socioeconomic status continuum have been rigorously documented in great detail (see [Hoff & Laursen, 2019](#); [Taraban & Shaw, 2018](#)). For example, it was found that socioeconomic status is related to parenting aspects such as warmth, restrictiveness, intrusiveness, corporal punishment, organization of the environment, provision of cognitively stimulating experiences, and time spend with the child ([Hoff & Laursen, 2019](#)). Moreover, a number of theoretical models, such as the Family Stress Model ([Conger & Elder, 1994](#)), the Environmental Chaos Model ([Wachs & Corapci, 2003](#)), the Social Risks Models (e.g., [Hoffman & Youngblade, 1998](#)), and the Social Benefits Models (e.g., [Walker et al., 2011](#)) have proposed links between parent's socioeconomic status and parenting.

Although there exists evidence of an association between socioeconomic status and parenting, the overall magnitude of this association can only be estimated through aggregating all relevant data. Therefore, the purpose of this study was to obtain an estimate of the strength of the association between overall socioeconomic status and parenting using meta-analytic methods.

It is worth mentioning that researchers have previously done meta-analyses of the relations between a number of parenting determinants and parenting such as parent's depression (Lovejoy et al., 2000), parent's personality traits (Prinz et al., 2009), child's temperament (Paulussen-Hoogeboom et al., 2007), and parent's marital quality (Erel & Burman, 1995). A meta-analysis of the relations between parent's socioeconomic status and parenting, which has not been done yet, will allow us to understand how the relation between socioeconomic status and parenting compares to the relations between other parenting determinants and parenting.

Before describing the method of the study, we will review literature on the definitions of socioeconomic status, the definitions of parenting, and the theoretical models of the associations between socioeconomic status and parenting.

Definitions of Socioeconomic Status and Parenting

Socioeconomic Status

Socioeconomic status is typically viewed to be composed of multiple facets, some of which capture the individual's economic resources, such as money, and others capture social resources, such as education. Coleman (1988) further divided the economic and social resources into financial capital, human capital, and social capital. The financial capital refers to the material resources that are related to money, such as food, clothing, and housing. The human capital refers to non-material resources such as knowledge and skills. The social capital refers to having access to and living according to the standards of a larger social group. The three types of capital are partially captured by measures of the individual or household's income level, educational level, and occupational status respectively. Hence, it is common to measure socioeconomic status through one or more of those indicators despite the disagreements about the best indicator that indexes each type of capital (e.g., Kohn & Schooler, 1982; Parcel & Menaghan, 1990; Rodrigo et al., 2001; Smith, 1999).

Disagreements also exist about how many indicators should be used to capture socioeconomic status. Some researchers use a single indicator such as educational level, while others use multiple indicators simultaneously such as educational level and occupational status. White (1982) recommended using the three indicators together to better measure socioeconomic status rather than using a single indicator. Other researchers use composite measures through combining multiple indicators in one index (e.g., Hollingshead index) although arguments have been proposed against their use (e.g., Bornstein et al., 2003, p. 66; Conger & Donellan, 2007; Duncan & Magnuson, 2003; Duncan & Magnuson, 2012, p. 377). All in all, the choice of how to measure socioeconomic status remains open due to the lack of definitive evidence that favors one measure over the others (Bradley & Corwyn, 2002).

Parenting Practices

Parenting is broadly defined as the process of nurturing and promoting the development of children (Brooks, 2013). It includes cognitions, styles, and practices (Hoff & Laursen, 2019). In this study, we focus on parenting practices only.

Parenting practices refer to the parents' behaviors with their children, the environments that parents produce for their children at home, and the relations with the world outside the home that parents allow (Hoff & Laursen, 2019). Instead of focusing on specific parenting practices such as setting curfews, spanking, reasoning, and hugging, a key task for parenting researchers was to identify patterns that capture the nature of parenting practices (Power, 2013). As a result, there are two frameworks for classifying parenting practices that are commonly used in the parenting literature. The first framework classifies parenting practices into two broad domains, which are "positive parenting" and "negative parenting" (e.g., Taraban & Shaw, 2018). Positive parenting encompasses parenting practices that are linked to positive child outcomes, while negative parenting includes parenting practices that are associated with negative child outcomes. The second framework classifies parenting practices into three specific dimensions, which are parental warmth, parental behavioral control, and parental psychological control (e.g., Power, 2013; Prinzie et al., 2009). Parental warmth refers to the general tendency to be responsive, affectionate, supportive, accepting, and sensitive towards the child (Zhou et al., 2002). Behavioral control refers to the provision of structure, regulations, and restrictions on the behavior of the child (Bean et al., 2006). Psychological control refers to the "intrusion and manipulation of the child's psychological world" (Barber, 1996; Bean et al., 2006).

Theoretical Models About the Relations Between Socioeconomic Status and Parenting

A number of theoretical models have suggested links between socioeconomic status and parenting practices. For example, the Family Stress Model (Conger & Elder, 1994) proposed that socioeconomic status is associated with parenting practices indirectly through affecting parents' circumstances. To explain, low socioeconomic status affects parents' conditions, such as marital quality, mental health, physical health, and social capital, which in turn interfere with their parenting practices (e.g., Amato et al., 2007; Evans, 2004; Hoff & Laursen, 2019; Rowe et al., 2005). Moreover, the Environmental Chaos Model (Wachs & Corapci, 2003) posited that low socioeconomic status is associated with household disorganization such as crowdedness and absence of routine, which consequently affects parenting practices (e.g., Corapci & Wachs, 2002; Vernon-Feagans et al., 2012; Weisner, 2010). Other models suggested a moderating role for socioeconomic status in the relation between other predictors of parenting and parenting. For example, the Social Risks Models (e.g., Hoffman & Youngblade, 1998) proposed that socioeconomic status

may hinder the positive effects of certain parenting predictors on parenting, or increase the potential that certain predictors, such as parents' depression, trigger negative parenting practices. On the other hand, the Social Benefits Models (e.g., [Bhanot & Jovanovic, 2005](#)) proposed that socioeconomic status may amplify the positive effects of certain predictors or decrease the potential that certain predictors trigger negative parenting.

It is important to note that these models have proposed links between socioeconomic status and parenting practices without delineating the pathways between specific indicators of socioeconomic status and parenting. However, evidence from empirical studies showed that the associations between specific socioeconomic status indicators and parenting can be direct or indirect.

Pathways between Different Socioeconomic Status Indicators and Parenting

Education and Parenting

Education was found to be associated with a range of positive parenting practices such as warmth (e.g., [Lindsay, 2011](#)), positive discipline (e.g., [Stover & Kiselica, 2014](#)), reasoning (e.g., [Bluestone & Tamis-LeMonda, 1999](#)), teaching (e.g., [Nunes Cuadro et al., 2021](#)), and monitoring (e.g., [Bacio et al., 2015](#)), but negatively associated with negative parenting practices such as insensitivity (e.g., [Suor et al., 2017](#)), harsh parenting (e.g., [Halse et al., 2019](#); [Suor et al., 2017](#)), and psychological control (e.g., [Mabbe et al., 2016](#); [Stright et al., 2009](#)).

Past studies have also found that the associations between education and parenting can be direct or indirect. On one hand, it was found that education equips parents with the verbal skills that influence their ability to interact with their children ([Huttenlocher et al., 2007](#); [LeVine et al., 2001, 2012](#)), interact with their children's teachers, or help with their children's homework ([Lareau, 2011](#)). On the other hand, it was found that education is associated with factors that indirectly influence parenting such as physical health, mental health, and home environment. For example, it was reported that adults who have less education are more likely to engage in risky health-related behaviors such as smoking and sedentary lifestyle ([Conti et al., 2010](#)). Physical health problems, in turn, are associated with lower-quality parenting because they limit the time and energy that parents can spend on parenting ([Hoff & Laursen, 2019](#)). Furthermore, it was found that education was negatively related to the prevalence of mental health problems such as depression ([Dohrenwend et al., 1992](#)). Depression, in turn, was found to be associated with negative parenting practices such as low warmth ([Lovejoy, 1991](#)), low responsiveness ([Bettes, 1988](#)), and less talk with the children ([Rowe et al., 2005](#)). Moreover, it was found that low education is related to aspects of the home environment, such as absence of books, which makes it hard for parents and children

to engage in activities through which they share positive affect, such as reading (Ginsburg, 2007).

Income and Parenting

Past studies have found positive relations between parents' income and positive parenting practices such as warmth (e.g., Lindsay, 2011), responsiveness (e.g., Imami et al., 2015), autonomy support (e.g., Su-Russell & Russell, 2021), and positive interactions with their children (e.g., McConnell et al., 2011). Other studies found that parents' income was negatively related to negative parenting practices such as coercive parenting (e.g., Teng et al., 2018), withdrawn parenting (e.g., Vreeland et al., 2019), and harsh-intrusive parenting (e.g., Gustafsson et al., 2013).

The paths of influence between income and parenting can be direct or indirect. For example, it was found that parental income was directly associated with the provision of stimulating items to the children such as books, or stimulating activities, such as sports classes (Berger et al., 2009; Kaushal et al., 2011; Yeung et al., 2002). Parental income is also indirectly related to parenting through its relations with parents' physical and mental health. For example, it was found that income is negatively related to health problems such as diabetes, hypertension, and obesity (Adler & Stewart, 2010). Additionally, studies have reported higher levels of depression, anxiety, and antisocial behaviors among low income adults (Farrington, 1993; Kessler & Bromet, 2013). Worryingly, Lovejoy et al. (2000) found that parental depression negatively affects parenting, especially among low-income parents. Low income among parents was also found to be associated with low child monitoring and supervision (Chilcoat et al., 1996; Patterson & Capaldi, 1991).

Occupational Status and Parenting

Past studies which examined the relations between parents' occupational status and parenting practices have generally reported positive correlations between occupational status and parenting practices such as parental warmth (e.g., Kao et al., 2018; Mandara et al., 2009; Nix et al., 2009), supervision (e.g., Vitaro et al., 2012), responsiveness (e.g., Rodrigo et al., 2001), and involvement (e.g., Schulting et al., 2005). On the other hand, there are studies which reported negative relations between occupational status and parenting practices such as harsh parenting (e.g., Halse et al., 2019), permissiveness, and demandingness (e.g., Rodrigo et al., 2001).

Regarding the path of influence between occupational status and parenting, Kohn (1963) proposed a theory that delineates an indirect path between them. According to Kohn, the type of occupation that the parents hold shapes their parental child rearing values, which, in turn, shape their parenting practices. For instance, parents with blue collar jobs tend to prioritize conformity values, while parents with white collar jobs tend to prioritize self-direction values. Consequently, parents of different occupations will engage in different parenting practices that are

consistent with the values that they prioritize. The theory was supported empirically. According to Luster et al. (1989), there were negative correlations between prioritizing conformity values on one hand and the amount of talking time and freedom given to the child on the other hand. However, there were positive correlations between the valuation of self-direction and the aforementioned parenting practices. Luster et al. also found positive correlations between valuation of conformity on one hand, and spoiling the child or applying high control on them on the other hand. However, there were negative correlations between the valuation of self-direction and the aforementioned parenting practices.

Present Study

The aim of the present study was to find an estimate of the strength of the associations between socioeconomic status and parenting practices using meta-analytic methods.

In this meta-analysis, we focused on the most commonly used indicators of socioeconomic status, which are education, income, occupational status, or composites of them. Moreover, we used two systems for classifying the parenting practices. The first system focused on the two broad domains of parenting, which are “positive” parenting and “negative” parenting. To this end, we did a meta-analysis for the relations between each of the socioeconomic status indicators and positive parenting, and another for the relations between the same indicators and negative parenting. The second system focused on the three commonly identified parenting dimensions, namely warmth, behavioral control, and psychological control. For this purpose, we did separate meta-analyses for the correlations between socioeconomic status and each of the three aforementioned parenting dimensions.

Hypotheses

The Family Stress Model, the Environmental Chaos Model, and the Social Risks Models suggest that low socioeconomic status is linked with negative parenting. On the contrary, the Social Benefits Models suggest a link between higher socioeconomic status and positive parenting. As a result, we hypothesized that there will be positive associations between socioeconomic status and positive parenting, while there will be negative associations between socioeconomic status and negative parenting.

On a related note, parental warmth and behavioral control are considered positive parenting dimensions, while psychological control is considered a negative parenting dimension. Therefore, we also hypothesized that there will be positive associations between socioeconomic status and parental warmth, as well as parental behavioral control. On the contrary, there will be negative associations between socioeconomic status and parental psychological control.

Method

Sampling of Articles

We searched for relevant peer-reviewed journal articles and dissertations using PsycInfo, which is the most trusted database of psychological science literature (<https://www.apa.org/pubs/databasesocioeconomic/status/psycinfo>). We used the following search terms: Socioeconomic status AND Parenting/Parenting Styles/Parenting Practices/Childrearing/Childrearing Practices/Caregiving/Caregiving Practices, or Education/Income/Occupation AND Parenting. We restricted the search to articles published in English language only. We also expanded the search by inspecting the reference sections of review chapters on socioeconomic status and parenting (e.g., Bornstein, 2016; Hoff & Laursen, 2019; Roubinov & Boyce, 2017; Taraban & Shaw, 2018) in addition to meta-analyses about the predictors of parenting (e.g., Lovejoy et al., 2000; Paulussen-Hoogbeem et al., 2007; Prinzie et al., 2009; Wilson & Durbin, 2010).

Inclusion and Exclusion Criteria

Articles which reported correlation coefficients between parental education, income, and/or occupational status on one hand, and any parenting practices variables on the other hand were included for the meta-analysis. However, multiple articles were excluded for multiple reasons. First, articles were excluded if socioeconomic status was not indexed by education, income, or occupational status, but rather by other indicators such as poverty, economic difficulties, wealth, or subjective socioeconomic status. Second, articles were excluded if composite socioeconomic status indices included measures other than education, income, or occupational status. Third, articles were excluded if they examined parenting cognitions such as aspirations, beliefs, expectations, or values only, rather than parenting practices. Fourth, articles were excluded if they examined parenting styles, such as authoritative and authoritarian, rather than specific parenting practices, such as warmth and control. Fifth, articles were excluded if we could not obtain the items of the instruments that were used to measure parenting practices.

Coding of Articles

We prepared a general coding sheet in which we reported for every article the type of socioeconomic status indicator (education, income, occupational status, or composite), name of parenting practices measure, correlation coefficient(s) between socioeconomic status indicators and parenting practices, sample size, age of child when socioeconomic status and parenting were measured, person who rated socioeconomic status (mother or father), person who rated parenting (mother or father), and the design of the study (cross-sectional vs. longitudinal).

Then, we classified the correlations into two other separate sheets. The first sheet comprised of correlations between socioeconomic status and positive parenting practices. The second sheet comprised of correlations between socioeconomic status and negative parenting practices. Parenting practices that were found to be associated with positive child outcomes were classified as “positive”, while those that were associated with negative child outcomes were classified as “negative”.

We further divided the correlations in the original coding sheet into three separate sheets that included the correlations between socioeconomic status and parental warmth, parental behavioral control, and parental psychological control respectively (see [Prinzie et al., 2009](#) for a similar classification procedure). Parental warmth included practices such as showing physical affection, praising, being available, and helping child when needed. Parental behavioral control included practices such as monitoring, consistent discipline, and knowledge of child’s whereabouts. Parental psychological control included practices such as intrusiveness, criticism, directiveness, and overreactivity. A full list of the parenting practices that comprised each of the three parenting dimensions is in the online supplementary material. It is important to note that correlations that included variables that are the opposite of either parental warmth, parental behavioral control, or parental psychological control were reversed.

Next, we made sure that every article in every sheet is represented by one correlation only in compliance with the assumption of independence of observations. However, there are cases when multiple correlations between socioeconomic status and parenting practices were reported in a study. This happened, for example, when parenting practices were rated by both parents, when the correlations were measured more than once, or when two instruments or more were used to measure socioeconomic status or parenting. In the cases when multiple correlations were reported, we calculated the average of them, and used the average in the subsequent analyses.

Coding was done by the second author, and reviewed by the first author. Disagreements in coding were discussed until agreement was reached. All the coding sheets can be accessed using this link: https://osf.io/dh9fs/?view_only=ed8f5e9b65fb4aafb72eb044bbb6491

Analytic Plan

It was not reasonable to assume that all the studies have the same effect; therefore, we used a random-effect model ([Tufanaru et al., 2015](#)). We tested for variation in the effects between the studies using Cochran’s Q , which is calculated as the weighted sum of the squared deviation of each study’s effect from the pooled effect across studies ([Cochran, 1954](#)). A significant Q index implies that the true effect is not the same across studies.

Furthermore, we tested whether child’s sex or age moderates the relation between socioeconomic status and parenting using meta-regression tests.

We also tested for publication bias using several procedures. First, we tried to detect publication bias through visual inspection of the funnel plot, which is a scatter plot of the effect sizes against precision indices. A commonly used prediction index is the inverse of the standard error. An asymmetrical funnel plot is an indicator of publication bias. Second, we tested for the asymmetry of the funnel plot using Egger's test and Trim-and-Fill test. Egger's test regresses standardized effect sizes on their precisions (Egger et al., 1997). A nonsignificant regression intercept indicates the absence of publication bias (Rothstein et al., 2006). The trim-and-fill procedure removes studies that cause asymmetry in the funnel plot, estimates the true center of the trimmed funnel plot, replaces omitted/missing studies, and provides an adjusted aggregate effect based on the replaced studies (Duval & Tweedie, 2000).

All the analyses were performed using R's Metaphor package (Quintana, 2015; Viechtbauer, 2010). The R script can be accessed using this link: https://osf.io/dh9fs/?view_only=ed8f5e9b65fb4aafbb72eb044bbb6491

Results

A total of 161 studies were included in the meta-analysis (151 from peer-reviewed journals, 11 were theses or dissertations). Flow charts that report the number of included and excluded studies are found in Figures 1 and 2. The included studies were published between 1979 and 2021 (median = 2013), and 41 of them were longitudinal. Table 1 contains demographic information about the samples included in the meta-analysis.

Table 2 includes the results of the meta-analyses of the associations between socioeconomic status and positive/negative parenting. As shown in the table, we found a significant positive correlation between socioeconomic status and positive parenting ($r = .15$). On the other hand, we found a significant negative correlation between socioeconomic status and negative parenting ($r = -.13$). Both correlations had small magnitudes.

With respect to publication bias, the visual inspection of the funnel plots shows some evidence for publication bias (Figure 3). However, we found that Egger's test was not significant for the relation between socioeconomic status and positive parenting or negative parenting ($p = .23$ and $p = .27$ respectively). Moreover, although results of the trim-and-fill procedure showed some evidence of bias (see Table 3), the adjusted effect size was not statistically different from the original one. Hence, we conclude that, overall, there is no evidence for publication bias. The fact that most of the effect sizes in the meta-analysis were obtained from studies that did not intend to examine the relation between socioeconomic status and parenting supports our conclusion that publication bias is unlikely to be a cause of concern in this study.

We also performed meta-regression tests to inspect whether child's age or sex moderated the relations between socioeconomic status and positive/negative

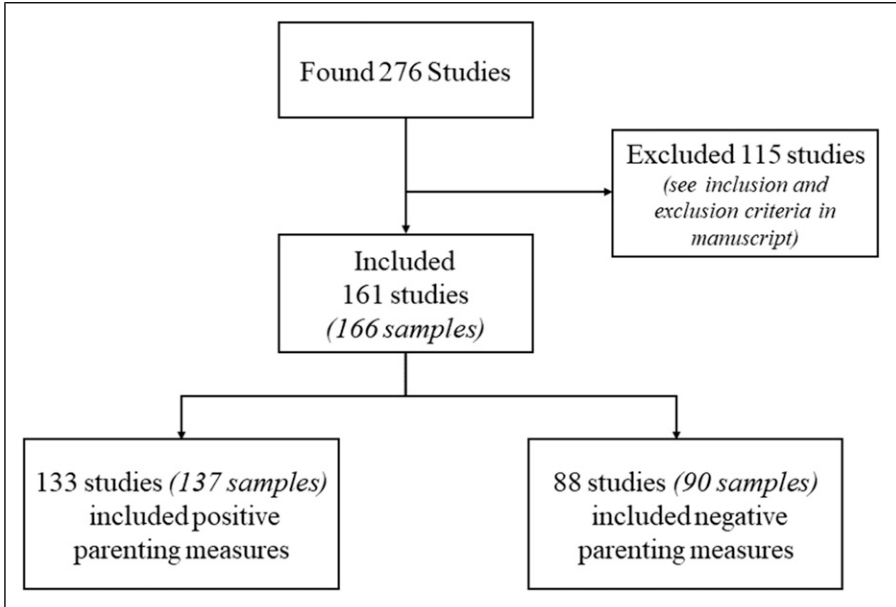


Figure 1. A flow chart reporting the number of articles found, excluded, and included in the meta-analyses of the relations between socioeconomic status and positive/negative parenting.

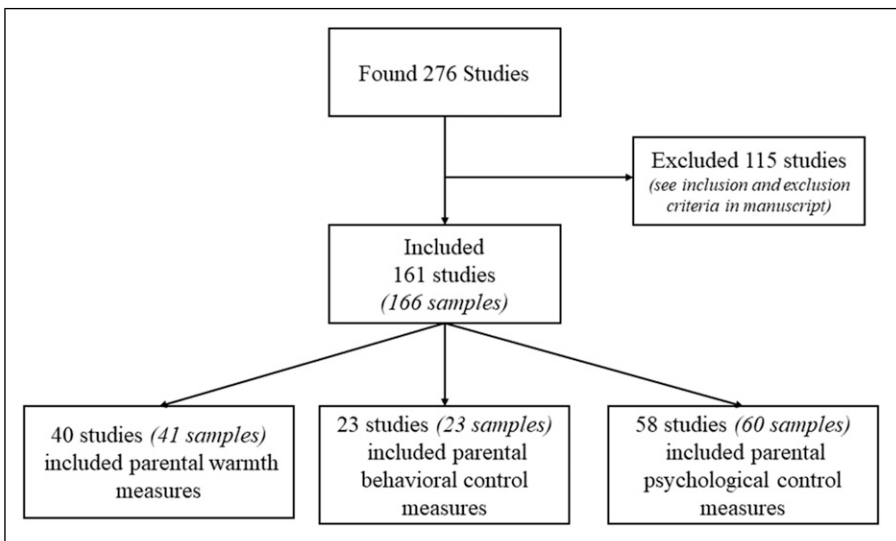


Figure 2. A flow chart reporting the number of articles found, excluded, and included in the meta-analyses of the relations between socioeconomic status and three parenting dimensions.

Table 1. Demographic Information About the Samples Included in the Meta-analysis.

	Demographic Information
Number of participants	Range = 14–15,529 Median = 296 Total = 128,434 (<i>parent-child dyads</i>)
Child' age	Mean = 8.70 years SD = 7.04
Child's sex	53.87% male
Sample's country	USA: 117 samples Europe: 16 samples Asia: 12 Canada: 11 samples USA (minorities samples): 3 samples Europe (immigrants samples): 3 samples Australia: 2 samples Latin America: 2 samples

Table 2. Results of Meta-analyses of the Relations Between SES and Positive/Negative Parenting.

Dependent Variable	K	Samples	<i>n</i>	ES	%95 CI	Q ²
Positive parenting	133	137	117,851	.15	[.12,.18]	2315.03
Negative parenting	88	90	42,551	-.13	[-.16,-.10]	728.32

SES = socioeconomic status; K = number of studies; Samples = number of samples in the studies; *n* = total sample size of studies; ES = effect size; CI = Confidence Interval; Q² = Heterogeneity Index.

Bold font indicates that results are statistically significant at *p*-value <.001.

parenting. As shown in [Table 4](#), two regression coefficients were statistically significant. We found that age moderated the relation between socioeconomic status and positive parenting as well as negative parenting. However, the regression coefficients were almost zero.

Furthermore, we performed separate meta-analyses of the relations between socioeconomic status and three parenting dimensions. These parenting dimensions are parental warmth, parental behavioral control, and parental psychological control. The results of these meta-analyses are shown in [Table 5](#). We found a significant positive correlation between socioeconomic status and parental warmth. Similarly, we found a significant positive correlation between socioeconomic status and parental behavioral control. On the contrary, we found a significant negative correlation between socioeconomic status and psychological control. The three correlations were small ranging between .09 and .17. None of the differences between the correlations were statistically significant according to [Fisher \(1921\)](#)

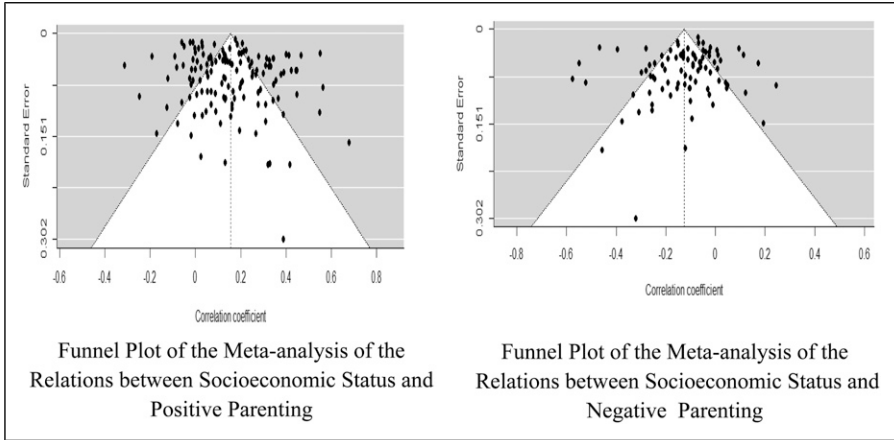


Figure 3. Funnel plots of the meta-analyses of the relations between socioeconomic status and positive/negative parenting. (a) Funnel plot of the meta-analysis of the relations between socioeconomic status and positive parenting and (b) Funnel plot of the meta-analysis of the relations between socioeconomic status and negative parenting.

Table 3. Results of Trim-and-Fill Publication Bias Test.

	Number of Missing Studies (To the Right)	Adjusted Effect Size (To the Right)	Number of Missing Studies (To the Left)	Adjusted Effect Size (To the Left)
Positive parenting	0	.15 [.13,.18]	0	.15 [.13,.18]
Negative parenting	0	-.13 [-.16,-.10]	9	-.15 [-.18,-.12]

Bold font indicates that results are statistically significant at p -value $< .001$.

Table 4. Results of Meta-regression Tests.

Parenting variable	Moderator (Child's Age)		Moderator (Child's Sex)	
	Regression coefficient	95% CI	Regression coefficient	95% CI
Positive parenting	-.006	[-.009,-.002]	-.001	[-.003,.001]
Negative parenting	.007	[.0008,.01]	.0003	[-.002,.002]

CI = Confidence Interval; Bold font indicates that results are statistically significant at p -value $< .05$.

and Soper (2022). The p -values of the differences scores between the correlations are in the online supplementary material.

Additionally, we inspected whether the relations between socioeconomic status and positive or negative parenting differed based on the type of socioeconomic status indicator. For this purpose, we did separate meta-analyses, such that each meta-analysis includes either education, income, occupational status, or socioeconomic status composite as the independent variable and either positive or negative parenting as the dependent variable. We did a total of eight meta-analyses. As shown in Tables 6 and 7, the most frequently used socioeconomic status indicator was composite measures, followed by education, income, and then occupational status. For each pair of correlations in Table 6 and Table 7, we calculated a difference score. We found that none of these difference scores were statistically significant. These results showed that the magnitude of the relations between socioeconomic status and parenting are not contingent on the type of socioeconomic status indicator.

Similarly, we examined whether the relations between socioeconomic status and parental warmth, behavioral control, or psychological control differed among the socioeconomic status indicators. We also found that the different socioeconomic status indicators had similar relations with the three parenting dimensions. The results of these additional analyses are in the online supplementary material.

Discussion

The purpose of this study was to obtain an aggregate estimate of the relations between parental overall socioeconomic status and parenting practices. The results of our meta-analysis supported our hypotheses. Specifically, we found that there is a significant positive correlation between socioeconomic status and positive parenting practices on one hand, and a significant negative correlation between socioeconomic status and negative parenting practices on the other hand. Additional analyses revealed correspondingly that socioeconomic status was positively linked to parental warmth and parental behavioral control, yet negatively linked to parental

Table 5. Results of Meta-analyses of the Relations Between SES and Three Parenting Dimensions.

Dependent Variable	K	Samples	n	ES	%95 CI	Q^2
Parental warmth	40	41	45,963	.11	[.07,.15]	476.79
Parental behavioral control	23	23	21,283	.09	[.04,.14]	247.79
Parental psychological control	58	60	37,973	-.17	[-.21,-.13]	1104.91

SES = socioeconomic status; K = number of studies; Samples = number of samples in the studies; n = total sample size of studies; ES = effect size; CI = Confidence Interval; Q^2 = Heterogeneity Index.

Bold font indicates that results are statistically significant at p -value <.001.

Table 6. Results of Meta-analyses of the Relations Between Specific SES and Positive Parenting.

SES Indicator	K	<i>n</i>	ES	%95 CI	Q ²
Education	64	69,101	.20	[.16,.24]	1433.03
Income	47	33,931	.20	[.15,.24]	930.63
Occupational status	14	31,657	.15	[.07,.22]	226.85
Composite	72	69,226	.14	[.10,.17]	1215.52

SES = socioeconomic status; K = number of studies; *n* = total sample size of studies; ES = effect size; CI = Confidence Interval; Q² = Heterogeneity Index.

Bold font indicates that results are statistically significant at *p*-value <.001.

Table 7. Results of Meta-analyses of the Relations Between Individual SES and Negative Parenting.

SES Indicator	K	<i>n</i>	ES	%95 CI	Q2
Education	35	16,551	-.16	[-.20,-.11]	434.48
Income	25	11,005	-.17	[-.22,-.11]	203.08
Occupational status	7	2277	-.11	[-.15,-.07]	6.81
Composite	53	28,089.5	-.10	[-.14,-.06]	353.78

SES = socioeconomic status; K = number of studies; *n* = total sample size of studies; ES = effect size; CI = Confidence Interval; Q² = Heterogeneity Index.

Bold font indicates that results are statistically significant at *p*-value <.001.

psychological control. Further analyses that examined the links between individual socioeconomic indicators and parenting demonstrated that education, income, occupational status, and composites of these indicators had similar correlations with parenting practices.

With respect to the magnitudes of the correlations between socioeconomic status and parenting, our results showed that they are small. Actually, they were comparable to the correlations found between parent's characteristics and parenting. For example, a meta-analysis found small correlations between parent's Big Five personality traits and parenting that ranged between $r = .11$ and $r = .19$ (Prinzie et al., 2009). Similarly, another meta-analysis found small correlations between parental depression and parenting (Lovejoy et al., 2000). In like manner, child's characteristics have small associations with parenting. For example, a meta-analysis found that child's negative emotionality had a small association with parenting ranging between $r = .06$ and $r = .10$ (Paulussen-Hoogbeem et al., 2007). In short, we found that socioeconomic status has associations with parenting that are analogous in magnitudes to associations between parent's personality characteristics, parental depression, child characteristics and parenting.

Interestingly, we found that there were no statistically significant differences between the correlations of socioeconomic status and the specific parenting dimensions. Our results suggest that socioeconomic status is equally associated with parental warmth, behavioral control, and psychological control.

By the same token, we found that the differences in the correlations between the various socioeconomic status indicators and parenting were not significant. Specifically, we found that education, income, occupational status, and the composite of some of or all of these indicators were not differentially linked to positive or negative parenting practices. Moreover, we found that the three indicators were not differentially linked to parental warmth, behavioral control, or psychological control. Equally important, we found that the relations between single socioeconomic indicators or composite indicators and parenting were similar.

Given these points, there are theoretical and practical implications for our study. On a theoretical level, our results suggest that parent's socioeconomic status supplements Belsky's (1984) model of parenting determinants. Although Belsky considered parent's work experiences as one of the predictors of parenting, our results suggest that the model can be expanded to be more inclusive. Not only are parent's work experiences associated with their parenting practices, but so are parent's education and income. On a practical level, our results suggest that there is no specific constituent of socioeconomic status that policy makers should prioritize operating on to improve the quality of parenting practices. That is to say that strategies which policy makers devise to increase the income of families in order to enhance the quality of parenting are equally important as the strategies that increase levels of parental education for example. We need to emphasize that the small magnitudes of the correlations between socioeconomic status indicators and parenting practices should not be discouraging to policy makers because effect sizes that are modest at the individual level could be consequential at the population level (Funder & Ozer, 2019).

Limitations and Future Directions

It is important to recognize several potential limitations concerning the results of this study. First, we excluded studies which used socioeconomic status indicators such as poverty level, economic hardship, neighborhood conditions, and subjective socioeconomic status. Therefore, the interpretation of our results should be limited to the relations between education, income, occupational status, or the composites of them on one hand, and parenting practices on the other hand. Second, some parenting practices were difficult to classify into "warmth", "behavioral control", or "psychological control" practices, so we excluded them from the analyses of the relations between socioeconomic status and parenting dimensions although they were included in the analyses status of the relations between socioeconomic status and positive/negative parenting. Third, we cannot eliminate the possibility that the observed correlations between socioeconomic status and parenting practices might

be partially due to confounding variables such as parent's cognitive abilities or personality characteristics (Corcoran & Adams, 1997). Fourth, our study focused on parenting practices; hence it excluded other parenting aspects such as parenting cognitions. It will be interesting to obtain aggregate estimates of the relations between socioeconomic status and parenting cognitions in future studies. We also think that further research is needed to examine the mediating role of parenting cognitions in the relation between socioeconomic status and parenting practices.

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Data Availability Statement

The coding sheets and the R script of this study are available on the Open Science Framework. They can be accessed through this link: https://osf.io/dh9fs/?view_only=ed8f5e9b65fb4aafbb72eb044bbb6491.

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