

Supplementary material

Table S1

Effect sizes and methodological, student, and teacher characteristics for individual studies reporting associations with engagement and/or achievement

author	year	<i>N</i>	grade level	student gender	student ethnicity	problem sample	teacher gender	teacher ethnicity	teaching experience	design	inform.	$r_{\text{engagement}}$	$r_{\text{achievement}}$
Arbeau et al.	2010	169	1	50.3	73.0	0	100.0	-	-	1	student	-.10	-
Bosman et al.	2018	1133	3-6	49.1	86.4	0	-	-	-	1	student/ test ^a	-.09	-.04
Doumen et al. ^b	2012	148	k	50.7	91.0	0	100.0	-	18.1	1	obs.	-.06	-
Fraire et al.	2013	1256	p-3	49.5	-	0	92.0	-	-	c	teacher	-	-.20
Garner & Waajid	2008	74	p	45.9	-	0.5	-	-	-	1	test	-	-.02
Hamre & Pianta	2001	179	k-4	49.2	60.0	0	-	92.3	10.3	1	teacher/ test + grades ^a	-.25	-.20
Henricsson & Rydell	2006	91	3-6	48.0	84.0	0	-	-	-	1	dif. teacher	-	-.31
Murray et	2008	145	k	54.0	8.0	1	100.0	66.7	19.0	c	student	-.08	-

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Palermo et al.	2007	95	p	48.0	54.0	0	75.0	-	-	c	teacher	-	-	-0.21
Pianta & Nimetz	1991	72	k-1	52.8	56.9	0	-	-	-	l	dif. teacher	-0.40	-	-
Pianta et al.	1997	55	p	40.0	31.0	1	100.0	100.0	-	l/c ^c	dif. teacher/ test ^a	-0.07	-	-0.32
Solheim et al.	2012	925	p	49.5	-	0.5	86.2	-	13.3	c	test	-	-	-0.07
Spilt et al.	2017	85	-	17.0	-	1	90.0	-	6.7	l	teacher	-0.35	-	-
Wu et al.	2015	524	k	44.3	-	0	95.0	-	6.7	c	teacher	-0.16	-	-

Notes. *N* = number of students.; For grade level, p = preschool, k = kindergarten.; For student/teacher gender and ethnicity, percentage of girls/female teachers and Caucasian students/teachers in the sample is reported.; For problem sample, 0 = no specific risk reported, 0,5 = partly consisting of at-risk students, 1 = completely consisting of at-risk students.; Teaching experience is reported in years.; For design, l = longitudinal design, c = cross-sectional design.; Informant (inform.) refers to the measurement of school adjustment (dependency was always reported by teachers), with obs. = observations, dif. teacher = reported by different teacher than the teacher who reported about dependency.; a. Informant engagement/informant achievement.; b. Independent observer ratings of teacher-student dependency were also included. Because of comparability with other studies, only teacher ratings of dependency were included in this meta-analysis.; c. Design for dependency and engagement/design for dependency and achievement.

Table S2

Effect sizes and methodological, student, and teacher characteristics for individual studies reporting associations with externalizing, internalizing, and/or prosocial behavior

author	year	<i>N</i>	grade level	student gender	student ethnicity	problem sample	teacher gender	teacher ethnicity	teaching experience	design	inform.	$r_{\text{externalizing}}$	$r_{\text{internalizing}}$	$r_{\text{prosocial}}$
Arbeau et al.	2010	169	1	50.3	73.0	0	100.0	-	-	l	teacher	-	.48	-.17
Birch & Ladd	1998	199	k	52.0	81.0	0	100.0	100.0	13.7	c	teacher	.11	.43	-.07
Bosman et al.	2018	1295	k	49.3	86.4	0	-	-	-	c	teacher	.25	-	-
Ewing & Taylor	2009	301	p	47.5	29.6	1	100.0	42.3	8.8	l	teacher	.19	.26	-
Garner et al.	2014	145	p	49.0	29.0	0.5	-	-	-	c	teacher	.14	-	-
Gluer & Gregoriadis	2017	158	p	49.4	-	0	100.0	-	14.8	c	teacher	.30	-	-.24
Henricsson & Rydell	2006	91	3-6	48.0	84.0	0	-	-	-	l	dif. teacher	.35	.30	-
Hughes et al.	2014	202	k	48.5	70.0	0	-	-	-	l	teacher	.35	.33	-.10
Koomen et	2012	169	-	45.6	-	0	-	-	-	c	teacher	.42	.46	-.23

al.														
Mejia & Hoglund	2016	461	k-3	51.0	50.5	1	96.9	82.2	11.8	1	teacher	.42	.47	-
Palermo et al.	2007	95	p	48.0	54.0	0	75.0	-	-	c	teacher	.56	-	-.36
Pianta & Nimetz	1991	72	k-1	52.8	56.9	0	-	-	-	1	dif. teacher	.23	.20	-
Pianta et al.	1997	55	p	40.0	31.0	1	100.0	100.0	-	1	dif. teacher	-.01	.13	-
Roorda et al.	2014	175	k	0.0	90.9	1	100.0	-	17.0	1	teacher	.24	.47	-.16
Sette et al.	2013	88	k	47.7	100.0	0	100.0	-	-	c	teacher	.18	.26	-
Solheim et al.	2012	925	p	49.5	-	0.5	86.2	-	13.3	c	teacher	.25	.23	-
Spilt et al.	2010	142	k	46.0	-	0	93.8	-	19.7	c	teacher	.16	.03	-
Spilt et al.	2017	85	-	17.0	-	1	90.0	-	6.7	1	teacher	-	-.09	-
Thijs et al.	2012	230	4-6	50.4	47.4	0	66.7	100.0	14.4	c	teacher	.45	.50	-
Troop-Gordon & Kopp	2011	410	4-5	52.9	87.1	0	72.0	-	-	1	peers	.21	-	-
Whittaker &	2010	100	p	54.0	2.0	1	100.0	0.0	17.0	c	teacher	.49	-	-

Harden

Zhang	2015	118	p	52.5	-	0	100.0	-	7.2	c	teacher	-	.13	-
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Notes. *N* = number of students.; For grade level, p = preschool, k = kindergarten.; For student/teacher gender and ethnicity, percentage of girls/female teachers and Caucasian students/teachers in the sample is reported.; For problem sample, 0 = no specific risk reported, 0,5 = partly consisting of at-risk students, 1 = completely consisting of at-risk students.; Teaching experience is reported in years.; For design, l = longitudinal design, c = cross-sectional design.; Informant (inform.) refers to the measurement of school adjustment (dependency was always reported by teachers), with obs. = observations, dif. teacher = reported by different teacher than the teacher who reported about dependency.

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