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Student teachers' judgements of students' academic and social characteristics: exploring the roles of teaching motivation and students' socioeconomic status

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ABSTRACT

We explored student teachers' judgements of students from various socioeconomic backgrounds and the relationships between these judgements and student teachers' motivation for becoming teachers. In an experimental vignette study, student teachers judged a welfare student less favourably than students with low and high socioeconomic status (SES), respectively. Four motivational profiles emerged – most student teachers were highly motivated, balanced, or altruistic, whereas a few were extrinsically motivated. Altruistic, balanced, and extrinsically motivated teachers judged the academic performance of high-SES students most favourably, whereas most extrinsically motivated teachers judged welfare students unfavourably in general. However, the altruistic and intrinsic profiles did not support these ratings of welfare students.

Introduction

Worldwide, students from high socioeconomic status (SES) families experience advantages over those from low-SES or welfare families (Bachsleitner, Lämmchen, and Maaz 2022; Blossfeld et al. 2016). These advantages extend to academic achievement (Bachsleitner, Lämmchen, and Maaz 2022; Liu et al. 2022), school track recommendations (Canaan 2020), and the managing of student misbehaviour (Glock and Kleen 2022). In Germany, for over 20 years, low-SES students have experienced lower educational outcomes than high-SES students, including grades and academic achievement, from preschool through secondary school (Bachsleitner, Lämmchen, and Maaz 2022). To this extent, teachers tend to judge the academic achievement of high-SES students more favourably than that of low-SES students (Auwarter and Aruguete 2008; Doyle, Easterbrook, and Harris 2023), which suggests an indirect advantage for high-SES students.

In addition, students' SES can influence teachers' perceptions of students' competencies and learning habits (Glock and Kleen 2020). Teachers often assume and expect that high-SES students are more motivated and have better work habits, leading to higher achievement (Gentrup et al. 2020). By contrast, low-SES students are often characterised as having below-average work habits and unsupportive parents (Schuchart and Dunkake 2014). Teachers rank low-SES students lower in ability and assign them lower grades than high-SES students, even when the written work contains objectively the same number of errors (Doyle, Easterbrook, and Harris 2023). Recently, the need to distinguish between different low socioeconomic classes has been emphasised, as welfare recipients may be stereotyped more negatively than other low-SES individuals (Yendell et al. 2023). Thus, we examined student teachers' judgements of school-relevant variables for students from high- and low-SES backgrounds, including welfare recipients. Our first research question was:

> RQ1: How do student teachers perceive high-SES, low-SES, and welfare students' academic achievement, engagement, popularity, and social behaviour in the classroom?

This educational disadvantage for low-SES students could be offset by factors that motivate individuals to become teachers, one of which is a commitment to supporting disadvantaged students (Thornberg et al. 2023). Research has focused on factors that contribute to the desire to become a teacher and on how student teachers' motivation is related to teaching practices and effectiveness (Han and Yin 2016). When focusing on aspiring teachers, socio-demographic characteristics, such as ethnic origin, gender, family educational and occupational status, and previous performance, appear to be the most predictive factors (Bergey and Ranellucci 2021; Gorard et al. 2023; Heinz and Keane 2018). However, the results are inconclusive. Some studies report that the intention to become a teacher appears to be greater among students from ethnic majority groups (Keane, Heinz, and Lynch 2023) and among those from less educated families, which may contribute to social and altruistic motivations to give back to society (Gorard et al. 2023). Other studies, however, do not support these results (Heinz and Keane 2018; Savage et al. 2021). The relationship between teachers' motivation and their judgement of students remains understudied. Thus, we aimed to investigate how student teachers' motivation for becoming teachers influences their judgements of fictitious students with different SES. Our second research question was:

> RQ2: Are student teachers' motivations for becoming teachers related to their perceptions of students from high-SES, low-SES, and welfare backgrounds in terms of academic achievement, engagement, popularity, and social behaviour in the classroom?

Teachers' judgments and stereotypes

Teachers overestimate the abilities and work ethic of high-SES students compared with low-SES students (Tobisch and Dresel 2017). In this vein, teachers' judgements about students with low SES are often biased, as teachers rate low-SES students' achievement lower than that of high-SES students despite identical performances

(Dickert and Glock 2025; Glock and Kleen 2023; Glock, Dickert, and Kleen 2025). Such biased judgements can be shaped by stereotypes (Bonefeld and Dickhäuser 2018; Tobisch and Dresel 2017). Stereotypes are generalised beliefs about members of social groups. They are independent of individual differences (Eagly and Chaiken 1993) and form automatically (Gilbert and Hixon 1991) due to the human tendency to categorise (Macrae and Bodenhausen 2000). The continuum model of impression formation distinguishes between automatic category-based processes, driven by stereotypes, and individuating processes, which require more engagement (Fiske and Neuberg 1990). Teachers may initially view low-SES students as less successful due to automatic stereotypes, but familiarity may reveal individual differences, which should help teachers revise these assumptions. Stereotypes help organise and interpret information (Taylor, Crocker, and D'Agostino 1978) and shape early assumptions about behaviour (Jussim, Eccles, and Madon 1996). In education, they influence teachers' expectations and behaviour towards students from specific groups (Gentrup, Olczyk, and Lorenz 2024; Glock, Krolak-Schwerdt, and Hörstermann 2016; Jussim, Eccles, and Madon 1996; Muntoni and Retelsdorf 2018; Tiedemann 2002), including those with varying SES levels.

Research shows that low-SES students are perceived as less competent than high-SES students (Dickert and Glock 2025; Tobisch and Dresel 2017), whilst high-SES is associated with high language proficiency, high ability, and good work habits (Glock and Kleen 2020). Teachers' judgements tend to favour high-SES students, even when actual achievement is controlled for. High-SES students are rated higher in cognitive and German proficiency skills but not in mathematics (Brandmiller, Dumont, and Becker 2020; Glock and Kleen 2023). They are also perceived as more motivated and better behaved (Brandmiller, Dumont, and Becker 2020), whereas low-SES students are often described negatively in terms of learning and work behaviour (Schuchart and Dunkake 2014). Also, student teachers are more likely to intervene (Glock, Dickert, and Kleen 2025) or apply stricter disciplinary measures (Dunkake and Schuchart 2015; Glock and Kleen 2022) when low-SES students display disruptive behaviour.

Teachers may apply strengths-based framing to high-SES students by focusing on students' competencies rather than deficits (Scheiner 2022). Deficit-based framing, by contrast, emphasises weaknesses and is often applied to ethnic-minority and low-SES students (Scheiner 2022). These framings provide background information that structures individuals' understanding of social interactions and may influence how teachers interpret and respond to students (Scheiner 2021, 2022). This idea aligns with stereotypes, which facilitate behaviour prediction (Kite and Withley 2016). Whereas framing helps structure classroom perceptions, stereotypes can shape expectations and judgements of individuals within the social world. In fact, recent research shows that perceptions of low SES can activate negative stereotypes and alter social behaviour, which in turn shapes social judgements and interactions in ways that can reinforce economic inequality (Hughes et al. 2025). Teachers often use deficit-based framing with ethnic-minority students, which emphasises errors (Louie, Adiredja, and Jessup 2021). This approach may also apply to low-SES students, who are stereotypically associated with negative traits when performing poorly (Schuchart and Dunkake 2014). However, little research has explored how high-SES students with poor work behaviour are judged (Glock and Kleen 2022; Glock, Dickert, and Kleen 2025). Especially in the light of different framings, it is

worth exploring whether unfavourable work behaviour can affect student teachers' judgements of students with different SES.

Families on welfare face additional disadvantages beyond low SES (Alba, Handl, and Müller 2017). In Norway, students receiving welfare support show lower academic achievement across all school levels and are overrepresented in vocational tracks (Dæhlen 2015; Kirkøen et al. 2021). These students likely experience compounded educational disadvantages (Dæhlen 2015). In addition, there are even more negative perceptions of welfare recipients than of the working poor. People on welfare are often perceived as lazy, uneducated, and unintelligent (Lindqvist, Björklund, and Bäckström 2017). Welfare recipients are generally viewed as less competent and warm than the working poor (Schofield, Suomi, and Butterworth 2022). Within this group, unemployed individuals are perceived as even less warm than other recipients (Suomi et al. 2022), making unemployment particularly stigmatising.

Motivations for becoming a teacher

Although aspiring teachers are motivated for various reasons (Fray and Gore 2018), intrinsic, altruistic, and extrinsic motivation are generally considered important aspects for the teaching profession (Bergmark et al. 2018; Han and Yin 2016). Rather than assuming preservice teachers form a homogeneous group, motivations differ in both degree and combination across specific subgroups (Bergey and Ranellucci 2021). Altruistic motivation emphasises the value and social impact of teaching. Teachers with altruistic motivation feel motivated by a sense of social responsibility for the development of children and young adolescents and have a desire to contribute to society (Bergmark et al. 2018; Pop and Turner 2009). Intrinsic motivation is driven by a personal interest in and enjoyment of teaching and the internal satisfaction derived from engaging in the teaching process itself (Bergmark et al. 2018). Teachers with primarily intrinsic motivation feel passion for teaching and want to acquire valuable knowledge and expertise to grow professionally (Bergmark et al. 2018). They are passionate about their subjects and enjoy sharing their knowledge with students (Bergmark et al. 2018). In contrast to intrinsic motivation, extrinsic motivation stems from the materialistic rewards that come with the profession, such as a good salary, career prestige, and good working conditions (Bergmark et al. 2018). Teachers may be motivated by a combination of factors (Bergmark et al. 2018; Pop and Turner 2009), with altruistic and intrinsic motivations dominating (Fray and Gore 2018; Pop and Turner 2009; Whiteford, Kelly, and Dawes 2021), while extrinsic motivation is usually considered less important (Heinz 2015). Therefore, a profile-oriented rather than a factorial approach may be more appropriate to examine the motivation of student teachers (Bergey and Ranellucci 2021).

In Germany, student teachers' career motivations have been assessed with a questionnaire, which includes achievement motivation, goal orientation, and intrinsic, extrinsic, and social motivations (Klemenz et al. 2014; König and Rothland 2013). Whereas intrinsic and extrinsic motivations are well established in career research (Watt and Richardson 2007), Klemenz et al. (2014) emphasise aspects such as shaping children's futures, social contribution, and addressing social disadvantages. Research has consistently highlighted intrinsic and altruistic motivation, particularly social responsibility and

equity, as key factors in career decisions (Kilinç, Watt, and Richardson 2012; König and Rothland 2013).

Considerable research has been conducted on the connection between aspiring teachers' motivations and various outcomes, such as teachers' self-efficacy (Thornberg et al. 2023) or job satisfaction (Hennessy and Lynch 2017). Although we focused on the career motivation of student teachers, teacher motivation is a broader construct (Hartl and Holzberger 2022) encompassing self-efficacy and enthusiasm (Burić and Kim 2020; Hartl and Holzberger 2022). Self-efficacy beliefs and enthusiasm can be associated with teachers' beliefs, including stereotypes (Hachfeld et al. 2012), and in turn shape teachers' judgements and perceptions of culturally diverse students (Chwastek et al. 2021).

Only a few studies have examined how teachers' motivation is related to teachers' judgements, such as their judgements of students' achievement or engagement. van Uden, Ritzen, and Pieters (2013) found that altruistic and intrinsic motivation are positively related to higher ratings of students' emotional engagement (e.g. enthusiasm and interest in school), whereas extrinsic motivation showed no such correlations. Motivation can affect stereotype perceptions and judgement formation. Research showed that student teachers often have high intrinsic motivation to respond without prejudice (Glock, Oude Groote Beverborg, and Müller 2016), potentially leading them to rely less on stereotypes and instead use individuating information when reacting or making judgements. In contrast, less intrinsically motivated teachers may rely more on category-based judgements. However, how intrinsic, extrinsic, and altruistic motivations affect (stereotype-based) judgements remains unclear.

Building on previous research, the current study first examined preservice teachers' judgements of the German language proficiency, mathematics achievement, and intelligence of students with unfavourable work behaviour and high SES, low SES, or a welfare status. Besides achievement-related judgements, we extended the field of judgements to include social dimensions, such as engagement, popularity, and social behaviour. Secondly, we also explored whether motivation for becoming a teacher influenced these judgements. Since motivation evolves across a teaching career (Hartl and Holzberger 2022), we examined initial motivations for becoming a teacher as a key aspect of the early career stage.

We expected student teachers to make more favourable judgements of high-SES students than of low-SES or welfare students. Regarding the different types of motivations for becoming a teacher, we expected that student teachers whose motivational patterns are strongly characterised by altruistic motivation would make more favourable judgements of low-SES and welfare students than those whose motivation clusters are dominated by intrinsic or extrinsic motivation. Altruistically motivated teachers aim to reduce inequalities, driven by a desire to promote social equity (Watt and Richardson 2007). They may actively support disadvantaged students and foster ambition. Unlike intrinsically motivated teachers, who focus on teaching, or extrinsically motivated ones, who prioritise personal benefits, highly altruistically motivated teachers emphasise equal opportunities, potentially leading to more favourable judgements of disadvantaged students. In contrast, teachers drawn to job security and financial benefits may primarily have extrinsic motivations to safeguard their own (high) SES. Consistent with prior research, we expected student teachers whose motivational patterns are dominated by extrinsic motivation to favour high-SES students (Auwarter and Aruguete 2008; Doyle, Easterbrook, and Harris 2023). Lastly, we expected that student teachers whose intrinsic motivation is most pronounced within their motivation clusters

would make less favourable judgements of low-SES and welfare students than teachers who are primarily motivated by altruistic motives.

Method

Participants and design

One hundred fifty-nine student teachers (142 female), all at the master's level, participated in this study. They had a mean teaching experience of 54.45 weeks ($SD = 102.32$). They focused on different German school tracks. The preservice teachers were randomly assigned to one of the three experimental conditions depicting a written scenario with either a high-SES, low-SES, or welfare student. Preliminary analyses were conducted for the three experimental groups (high-SES, low-SES, welfare student). The results indicated that the student teachers' teaching experience was similar across the three experimental groups, $F(2, 181) = 0.67$, $p = .51$, $\eta_p^2 = 0.01$, and that gender was evenly distributed among them. The study used a one-way between-subjects design (varying the SES of students' parents within the scenario: high SES vs. low SES vs. welfare). See Table 1 for participants' demographic characteristics.

Materials

Student description
We used the same description of a fictitious student as in previous research (Glock and Kleen 2022). We described Ben as a male student who often did not finish his homework (see Appendix). His parents were unable to attend meetings due to time constraints. The father's occupation varied between high SES (school principal), low SES (taxi driver), and welfare (living on welfare).

Judgement dimensions
We identified key judgement dimensions for the school context. The first, related to achievement, included four items. Participants were asked to rate the student's overall academic performance, German language proficiency (i.e. 'What do you

Table 1. Participants' demographic characteristics.

	n	%
Gender		
Female	142	89.3
Male	17	10.7
School track		
Highest school track	123	77.4
Elementary school	29	18.2
Middle school	13	8.2
Vocational school	18	11.3
Special education	11	6.9
Not reported	5	3.1
Experimental groups		
High SES (male/female)	18/46	28.6/71.4
Low SES (male/female)	13/48	21.3/78.7
Welfare (male/female)	18/48	27.3/72.7

Note. $N = 159$.

think is Ben's level of achievement in German?'), mathematical achievement, and intelligence (Cronbach's α = .75). The engagement dimensions included school motivation ('How motivated do you think Ben is in school?') and effort ('How much effort do you think Ben puts into school?'; α = .78). The perceptions of classmates' dimension comprised the popularity of the student and his social integration into the classroom (e.g. 'How well do you think Ben is integrated into his class?'; α = .82). The final dimension, assessed with one item, measured the student's tendency to disrupt lessons. The last two dimensions reflected the student's social behaviour in class.

Motivations for becoming a teacher

We compiled a brief questionnaire to assess the most important motivations: altruistic, intrinsic, and extrinsic (van Uden, Ritzen, and Pieters 2013). We used a questionnaire that was developed by Klemenz et al. (2014) and selected the following dimensions: Extrinsic motivation as indicated by job security measured with three items (α = .87; see also Watt and Richardson 2007), for example, 'Teaching will be a secure job'. Intrinsic motivation mirrored interest in the teaching profession (e.g. 'I like teaching') and was measured with three items (α = .48). Removing items from this scale did not improve its reliability. For altruistic motivation, we used three domains: Two items concerned the reduction of school disparities (e.g. 'Teaching will allow me to help those who are socially disadvantaged'; α = .66), three items related to working with children and adolescents (e.g. 'I want to help children and adolescents learn'; α = .81), and another three items reflected the desire to make a social contribution to society (e.g. 'Teaching enables me to give back to society'; α = .74). Aggregating these items yielded α = .81, so we used the composite score for the altruistic motivation dimension.

Demographic questionnaire

We compiled a questionnaire that assessed the participants' gender and teaching experience in weeks. We also asked participants to indicate the type of school they were focusing on and their parents' occupations separately for mothers and fathers. Due to privacy issues, we could not assess the participants' age.

Procedure

Student teachers from introductory educational courses were recruited and administered a questionnaire. The University Ethics Committee approved the study. Participants first gave informed consent, were randomly assigned to one of three status conditions, and were then presented with one of the three student vignettes. The student teachers first read the student vignette and judged the student on the above-mentioned dimensions using a 7-point Likert scale ranging from 1 (*low*) to 7 (*high*). The student teachers were then given a questionnaire that asked about their motivation for becoming a teacher and indicated their agreement with the different statements on a 7-point Likert scale ranging from 1 (*do not agree at all*) to 7 (*strongly agree*). Finally, they filled out a demographic questionnaire and were thanked and debriefed.

Results

Judgements as a function of students' SES

First, we computed a MANOVA that used all four judgement dimensions as dependent variables and status (high SES vs. low SES vs. welfare status) as a between-subjects variable. This MANOVA showed a significant main effect of status, $F(8, 374) = 5.60$, Wilks' $\Lambda = .80$, $p < .001$, $\eta_p^2 = 0.11$. To explore this effect, we separately computed one-way between-subjects ANOVAs for each judgement dimension (see Table 2 for all Ms, SDs, and results of the ANOVAs).

Academic achievement

The ANOVA showed a significant main effect of SES. Simple effect tests indicated that student teachers rated the high-SES student's academic achievement higher than the welfare student's achievement, $t(131) = 4.97$, $p < .001$, $d = 0.87$. The low-SES student's achievement was also rated higher than that of the welfare student, $t(127) = 4.11$, $p < .001$, $d = 0.72$, whereas there was no difference in the achievement judgements between high- and low-SES students, $t(126) = 1.12$, $p = .26$, $d = 0.21$ (see Figure 1).

Table 2. Means, standard deviations (in parentheses), and the results of the ANOVAs pertaining to the different judgement dimensions as a function of students' SES.

	High-SES student (n = 66)	Low-SES student (n = 62)	Welfare student (n = 67)	ANOVA
Academic achievement	4.12 (0.72)	3.98 (0.61)	3.55 (0.59)	$F(2, 192) = 14.10$, $p < .001$, $\eta_p^2 = 0.13$
Engagement	3.23 (0.88)	3.10 (1.07)	3.02 (0.91)	$F(2, 192) = 0.85$, $p = .43$, $\eta_p^2 = 0.01$
Classmates' perceptions	4.55 (0.89)	3.96 (0.87)	3.68 (1.02)	$F(2, 192) = 15.25$, $p < .001$, $\eta_p^2 = 0.26$
Tendency to disrupt lessons	3.65 (1.41) [n = 65]	3.56 (1.43) [n = 61]	3.76 (1.42) [n = 67]	$F(2, 190) = 0.33$, $p = .72$, $\eta_p^2 = 0.00$

Note. The values in brackets show the subsample sizes, which are different from the values displayed in the heading of the table.
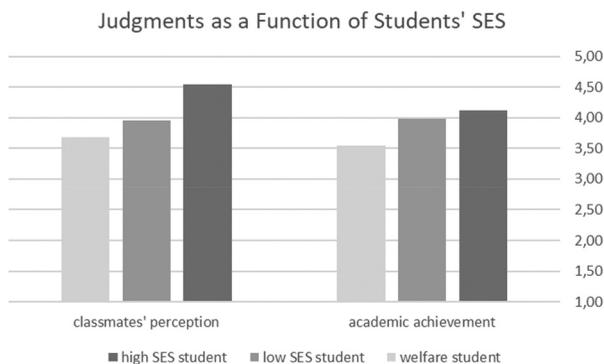

Figure 1. Significant judgments as a function of students' SES.

Student engagement

The ANOVA on engagement was nonsignificant, indicating judgements of student engagement did not vary as a function of their SES.

Classmates' perceptions

The ANOVA yielded a significant main effect of classmates' perceptions. The student teachers judged the classmates' perceptions (popularity and social integration) more positively for the high-SES student than for the low-SES student, $t(126) = 3.82$, $p < .001$, $d = 0.67$, or the welfare student, $t(131) = 5.27$, $p < .001$, $d = 0.91$. Participants' judgements did not differ between the low-SES and the welfare student, $t(127) = 1.67$, $p = .10$, $d = 0.30$ (see Figure 1).

Tendency to disrupt lessons

The ANOVA on the tendency to disrupt lessons was nonsignificant, indicating judgements of students' disruptive behaviour did not vary as a function of their SES.

Motivation for becoming a teacher

A cluster analysis was conducted to explore student teachers' motivation profiles based on the intrinsic, extrinsic, and altruistic domains. Hierarchical clustering (Ward's method) suggested three or four clusters. K-means clustering for both solutions revealed that the three-cluster model was driven mainly by extrinsic motivation and was difficult to interpret. However, the four-cluster solution provided a clearer pattern, showing more distinct variations across the domains. More specifically, Cluster 1 'highly motivated' ($n = 86$; 44%) included teachers who scored high on all three domains, therefore showing a diverse and yet highly pronounced, high level of motivation; Cluster 2 'altruistic' ($n = 37$, 19%) was characterised by moderately high scores on intrinsic motivation and altruism, but relatively low scores on extrinsic motivation. This profile may reflect that the altruistic motivation of these student teachers merely confirmed their intrinsic beliefs (Schwartz and Howard 1984); Cluster 3 'extrinsically motivated' ($n = 22$; 11%) included student teachers who scored high on extrinsic motivation but relatively low on intrinsic motivation and altruism. Cluster 4 'balanced with an emphasis on altruism' ($n = 50$; 26%) included student teachers with moderate scores on intrinsic and extrinsic motivation and moderately high scores on altruism. This profile reflects a mixture of altruistic, intrinsic, and extrinsic motivations and could result in prosocial behaviour, which mainly focuses on the results of (teachers') actions on (students') outcomes (Schwartz and Howard 1984). The MANOVA showed a strong effect of motivational clusters on the observed variables, $F(3, 191) = 65.17$, $p < .001$, $\eta_p^2 = 0.51$. Univariate results showed that intrinsic motivation was highest in Cluster 1 (highly motivated), followed by Clusters 2 (altruistic), 3 (extrinsically motivated), and 4 (balanced with altruism). Extrinsic motivation was highest in Clusters 1 and 3, followed by Cluster 4, then Cluster 2. Altruism was highest in Cluster 1, followed by Clusters 2 and 4, and lowest in Cluster 3 (see Figure 2).
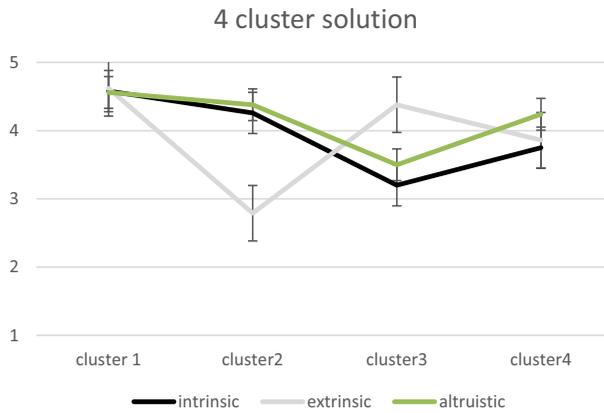
4 cluster solution

Figure 2. Results of the cluster analyses with intrinsic, extrinsic, and altruistic motivation for the four motivational profiles.

Preservice teachers' motivational profiles and their judgements of students from different SES backgrounds

We computed a MANOVA to examine differences in teachers' motivational profiles and their judgements of student proficiency and behaviour, with student SES as a factor, and layered by cluster (see Table 3 for results). Teachers' judgements varied by motivational

Table 3. Descriptive statistics for student teachers' judgements as a function of students' SES and Cluster and MANOVA summary (N = 193).

	High SES M (SD)	Low SES M (SD)	Welfare M (SD)	df	F
Cluster 1 (highly motivated)	n = 26	n = 25	n = 35		
Multivariate		λ = .76		8, 160	2.99**
Academic achievement	3.99 (0.97)	3.92 (0.68)	3.63 (0.58)	2, 83	2.05
Engagement	3.29 (0.89)	2.76 (1.00)	2.93 (0.82)	2, 83	2.36
Classmates' perceptions	4.58 (0.92)	3.92 (0.67)	3.69 (1.07)	2, 83	7.17***
Disruptive	3.96 (1.40)	4.04 (1.46)	3.71 (1.38)	2, 83	0.45
Cluster 2 (altruistic)	n = 13	n = 13	n = 10		
Multivariate		λ = .46		8, 60	3.57**
Academic achievement	4.17 (0.51)	4.10 (0.56)	3.30 (0.69)	2, 33	7.46**
Engagement	3.19 (0.99)	3.54 (1.23)	3.15 (0.88)	2, 33	0.50
Classmates' perceptions	4.62 (0.85)	3.62 (1.10)	3.55 (1.24)	2, 33	3.94*
Disruptive	3.46 (1.20)	3.08 (1.38)	2.70 (1.49)	2, 33	0.90
Cluster 3 (extrinsic)	n = 9	n = 6	n = 7		
Multivariate		λ = .30		8, 32	3.26**
Academic achievement	4.33 (0.57)	3.75 (0.22)	3.43 (0.79)	2, 19	4.87*
Engagement	3.33 (1.06)	2.67 (0.82)	2.86 (1.41)	2, 19	0.71
Classmates' perceptions	4.56 (1.07)	4.33 (0.82)	3.36 (0.80)	2, 19	3.50*
Disruptive	2.44 (0.88)	2.50 (1.64)	5.00 (0.82)	2, 19	12.27***
Cluster 4 (balanced with emphasis on altruism)	n = 17	n = 17	n = 15		
Multivariate		λ = .73		8, 86	1.87+
Academic achievement	4.09 (0.41)	4.06 (0.66)	3.58 (0.42)	2, 46	4.80*
Engagement	3.15 (0.77)	3.32 (0.97)	3.23 (0.90)	2, 46	0.17
Classmates' perceptions	4.41 (0.82)	4.18 (0.93)	3.90 (0.89)	2, 46	1.35
Disruptive	3.94 (1.52)	3.59 (1.12)	4.00 (1.20)	2, 46	0.49

Note. Two of the 195 participants were excluded because of missing data.
^+p < .10. *p < .05. **p < .01.***p < .001.

profiles. Univariate results for academic performance showed that, except for highly motivated teachers, teachers provided higher ratings for the high-SES student than for the welfare student. In addition, altruistic and balanced teachers rated the low-SES student more positively than the welfare students. Regarding classmates' perceptions, highly and extrinsically motivated teachers, and to a lesser extent altruistic teachers, rated the high-SES student more positively than the welfare student. Only teachers in Cluster 1 rated the high-SES student higher than the low-SES student. Furthermore, only extrinsically motivated teachers rated disruptive behaviour higher for the welfare students than for the high- and low-SES students. No differences were found in ratings of student engagement.

Discussion

Our study shows that student teachers' judgements are influenced by students' SES, with welfare students perceived the least favourably, especially in the domain of academic achievement. This may stem from stereotypes linking welfare recipients to laziness and low education (Lindqvist, Björklund, and Bäckström 2017). Based on stereotypical beliefs and the nonsignificant differences between high- and low-SES students, the student teachers might still have inferred that education is important to parents in both groups (Khattab 2003). Previous research has identified parents' educational expectations as a key factor mediating the relationship between SES and students´ academic achievement (Şengönül 2022). Hence, besides the (stereotypical) assumption that high-SES parents have high educational aspirations and expectations for their children, which is supported by research findings (Stull 2013), studies also demonstrate that working-class families place a strong emphasis on academic success as a pathway to upward social mobility and likewise maintain high aspirations for their children (Kundu, Liu, and Ahn 2023). This shared emphasis could have contributed to the result that students with low and high SES were evaluated equally in terms of their academic achievement.

In line with previous research, student teachers rated the high-SES student as more popular and socially integrated than the low-SES and welfare students (Lintner 2022). Student teachers' judgements of students' engagement did not depend on students' SES, in contrast to previous research showing that teachers tend to rate learning motivation favourably for high-SES students (Brandmiller, Dumont, and Becker 2020). Although closely related, students' learning motivation and engagement are distinct concepts. Engagement typically includes emotional and behavioural aspects such as enthusiasm and participation (van Uden, Ritzen, and Pieters 2013), which were not differentiated in our study. Thus, our measurement of effort and overall motivation might not fully capture the nuances of students' engagement. These nonsignificant findings may partly result from the vignette's clarity. Unlike inferred information that can trigger bias (Smith 1998), participants received a straightforward indicator of low engagement (i.e. missing homework; Combette et al. 2021), making judgement differences less likely. Even though student teachers showed differences in their reactions to disruptive behaviour (Glock and Kleen 2022), and research has shown that low-SES students show more behavioural problems than high-SES students (Baker et al. 2006), the student teachers in our study did not perceive differences in frequency of disruptive behaviour across the three SES groups. Behavioural problems often involve behaviours such as talking out of turn or running

around. It is unclear which form of misbehaviour student teachers expected from the vignette used in this study. However, as the main causes of disruption are often found in students' home environments (Mavropoulou and Padeliadu 2002), differences in perceived frequency may be minimal, as in the vignette parents, regardless of SES, had no time for school engagement.

Although it can be said that the less favourable academic assessments and judgements regarding the popularity and social integration of welfare recipients might be linked to deficit-oriented framings, these framings do not appear to apply to the assessment of these students' engagement or disruption of lessons. These results might stem from social class stereotypes that frequently frame low-SES individuals as low in competence and sometimes as equally warm as they are competent (Fiske et al. 2002). These findings would support the idea that the academic and popularity domains might be more tightly connected to deficit-oriented stereotypes than the engagement and disruptive behaviour domains.

Our analysis of participants' motivation for becoming teachers revealed four distinct clusters. The first cluster ('highly motivated') comprised student teachers who were highly motivated in general and strongly endorsed all types of motivations. This pattern resembles the 'motivated and affectively committed' teachers' profile described by Canrinus et al. (2011). Notably, these student teachers did not show differences in their academic achievement judgements of students with different SES levels. As a highly motivated group, they may be enthusiastic about teaching and feel equipped to handle any obstacles or disparities that students bring from their home environments. Consequently, they did not seem to have biased perceptions or stereotypical expectations based on SES.

The second cluster ('altruistic') was primarily dominated by altruistic motivations and, to a lesser extent, intrinsic and extrinsic motivations. These student teachers felt strongly motivated to help the children and reduce disparities in school; nonetheless, they rated the welfare student as performing worse academically than the high- or low-SES students and thought that the high-SES student would be the most popular in class. This finding is intriguing, as one would not expect this cluster to exhibit such positive bias towards the high-SES student. Nevertheless, even personally committed student teachers who aim to make worthwhile contributions perceived notable differences in the academic achievement of high-SES, low-SES, and welfare students. Choosing teaching as a way to make an impact in children's lives and helping others is often rooted in social justice frameworks. While student teachers may be motivated by a 'sense of mission' (Manuel and Hughes 2006), they may have idealistic expectations when encountering students with different SES levels.

The third group of student teachers ('extrinsically motivated') strongly endorsed extrinsic motivation for becoming a teacher, although they also expressed intrinsic or altruistic motivations. Interestingly, this group rated the welfare student lowest in academic performance and popularity and highest in disruptive behaviour compared to the high- and low-SES students. These findings seem plausible when considering that this group's strongest motivations for becoming a teacher were related to job security and the status and respect that come with the profession (Mehmet, Isa, and Durdağı 2022). These teachers may have lower social motivation and interests (Klusmann et al. 2009), which could result in a negative bias against welfare students

in almost all judgement dimensions. Indeed, researchers have found a profile of 'competence doubting', in which teachers give low ratings of their self-efficacy while simultaneously showing the highest satisfaction with their salary (Yüce et al. 2013). As teaching students with low SES has been associated with lower self-efficacy beliefs (Kast et al. 2021), these teachers may feel low self-efficacy in teaching and in managing welfare students, which might also contribute to unfavourable judgements of these students.

The student teachers in Cluster 4 ('balanced with an emphasis on altruism') seemed to focus on how their teaching might impact student outcomes. Such a focus is one of the main facets of self-efficacy (Gibson and Dembo 1984) and is context-specific (Bandura 1977). Even when their judgements seemed to be affected by stereotypical expectations, their perceptions of disruptive behaviour were unaffected, as such perceptions can be shaped more by self-efficacy beliefs in classroom management.

In almost all four clusters, student teachers rated the high-SES student as more popular and socially integrated than the low-SES and welfare students. Popularity in class is often affected by a student's SES, as SES shows that students have a great deal of prestige and influence in class (Heyder and Kessels 2017). High SES (Lintner 2022) and achievement (Francis, Skelton, and Read 2010) are positively correlated with popularity. However, the results of previous research on popularity have relied primarily on student ratings rather than teacher ratings. Hence, our study provides new insights into how student teachers rate students' popularity and integration in class in relation to students' SES. However, when considering the low reliability of the intrinsic motivation scale, such findings should be interpreted with caution.

In summary, motivational clusters explain teaching-career motivations but also affect teachers' judgements. In this study, we first identified distinct motivational profiles among student teachers and subsequently examined how these profiles are related to differences in their evaluations of students from varying socioeconomic backgrounds. Whereas highly motivated teachers showed no bias, extrinsically motivated ones rated high-SES students more favourably. These findings highlight how intrinsic, altruistic, and extrinsic motivation influence teachers' judgements beyond career choice.

Our findings further indicate that student teachers' judgements are shaped by students' SES, particularly regarding academic achievement and popularity, and that these biases vary across motivational clusters. These new insights link career motivations not only to career choice but also to classroom judgements. For teacher education, this underscores the need to address how SES-related stereotypes might influence judgements by fostering bias awareness and promoting critical reflection on judgemental bias for student teachers. In this regard, interventions have yielded initial fruitful results among student teachers in Germany (Bonefeld 2022; Fehringer, Bonefeld, and Schunk 2025). Since certain motivational patterns may protect student teachers from biased judgements, whereas others appear to increase the risk of unfavourable evaluations for socially disadvantaged students, teacher education could emphasise the importance of teachers' social responsibility by referring to the social contribution of teaching and providing student teachers with opportunities to strengthen their social intentions.

Limitations

We focused only on male students, as they have been found to be less well-adjusted in school (Heyder and Kessels 2013) and perceived as more disruptive and louder in class (Glock and Kleen 2017). Although some research did not report gender differences (Glock and Kleen 2022), future research should focus on female students. In a previous study, teachers judged low-SES female students more positively than low-SES male students, and the reverse effect was found for high-SES students (Auwarter and Aruguete 2008). These results argue for the importance of focusing on female students as well.

We did not assess participants' perceptions of parental behavioural causes. Parental involvement benefits students and is valued by teachers, regardless of SES (Jeynes 2005; Koutrouba et al. 2009). However, SES and involvement are strongly correlated (Cheadle and Amato 2011). Whereas high-SES mothers who leave work for childcare are viewed positively (Stone and Hernandez 2013), low-SES mothers face negative perceptions (Dodson 2013), potentially influencing assumptions about their involvement.

We did not distinguish between types of schools in examining teachers' motivation, but research suggests different motivations for teachers in vocational or high schools compared with primary or comprehensive schools (Retelsdorf and Möller 2012; Stellmacher et al. 2020). Because motivations such as working with children and addressing social inequalities are prominent among primary school teachers (Retelsdorf and Möller 2012), the reported effects may be more pronounced in primary school settings. Further research is needed to compare types of motivation across teaching contexts.

Additionally, we found a study on gender differences in types of motivation (Yüce et al. 2013). In Turkey, female student teachers favour altruistic and intrinsic motivations, while males prioritise extrinsic motivation (Yüce et al. 2013). Our predominantly female sample may have shaped the altruistic and balanced motivational clusters. To investigate this further, future research should consider gender in studies on teachers' motivation.

Student teachers' background characteristics (e.g. their social background) may have an impact on their motivations for becoming a teacher (Fray and Gore 2018; Gorard et al. 2023; Heinz and Keane 2018) and their aim to be a relatable and inclusive teacher when working with students from different social backgrounds (Keane, Heinz, and Lynch 2023). It is therefore important to explore these relationships in future research by including student teachers coming from diverse (SES) backgrounds. With regard to increasing teacher diversity, an aspect that many countries strive for because of its proven benefits for the students (Villegas and Irvine 2010), empirical data show that this is challenging. This is partly due to educational inequalities throughout the educational pathway and to selection criteria for teacher training programmes and access to the teaching profession (Pit-ten Cate, Rivas, and Busana 2021).

Given the low reliability of the intrinsic motivation scale and the small extrinsic cluster, cautious interpretation is needed for extrinsically motivated student teachers. As our study was exploratory, future research may use additional questionnaires to assess teachers' motivations and identify clusters before teachers judge student vignettes.

Conclusion

Despite limitations, our study shows that both students' SES and student teachers' motivations to become a teacher can influence judgements. Certain motivational

patterns may help reduce educational disparities and highlight the need for further research on teacher-related factors that may affect teachers' judgements of students.

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Author contributions

AS and JD contributed to the interpretation and theoretical incorporation of the research data and to the writing of the manuscript. IPtC and SG contributed to the analysis of the data. SG contributed to designing and conducting the research, conceptualising the original draft of the manuscript, and supervising the project.

Disclosure statement

References

Alba, R. D., J. Handl, and W. Müller. 2017. "Ethnische Ungleichheit im deutschen Bildungssyste [Ethnic Disparities in the German School System]." *KZfSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie* 69 (Supplement 1): 619–644. https://doi.org/10.1007/s11577-017-0421-x.

Auwarter, A. E., and M. S. Aruguete. 2008. "Effects of Student Gender and Socioeconomic Status on Teacher Perceptions." *The Journal of Educational Research* 101 (4): 243–246. https://doi.org/10.3200/JOER.101.4.243-246.

Bachsleitner, A., R. Lämmchen, and K. Maaz. 2022. *Soziale Ungleichheit des Bildungserwerbs von der Vorschule bis zur Hochschule. Eine Forschungssynthese zwei Jahrzehnte nach PISA*. Waxmann Verlag GmbH. https://doi.org/10.25656/01.

Baker, J. A., R. W. Kamphaus, A. M. Horne, and A. P. Winsor. 2006. "Evidence for Population-Based Perspectives on Children's Behavioral Adjustment and Needs for Service Delivery in Schools." *School Psychology Review* 35 (1): 31–46. https://doi.org/10.1080/02796015.2006.12088000.

Bandura, A. 1977. "Self-Efficacy: Toward an Unifying Theory of Behavioral Change." *Psychological Review* 84 (2): 191–215. https://doi.org/10.1037/0033-295X.84.2.191.

Bergey, B. W., and J. Ranellucci. 2021. "Motivation Profiles of Urban Preservice Teachers: Relations to Socialization, Initial Career Perceptions, and Demographics." *Contemporary Educational Psychology* 64 (December): 101936. https://doi.org/10.1016/j.cedpsych.2020.101936.

Bergmark, U., S. Lundström, L. Manderstedt, A. Palo, U. Bergmark, S. Lundström, L. Manderstedt, and A. Palo. 2018. "Why Become a Teacher? Student Teachers' Perceptions of the Teaching Profession and Motives for Career Choice." *European Journal of Teacher Education* 41 (3): 266–281. https://doi.org/10.1080/02619768.2018.1448784.

Blossfeld, H.-P., S. Buchholz, J. Skopek, and M. Triventi. 2016. "Preface." In *Models of Secondary Education and Social Inequality: An International Comparison*, edited by H.-P. Blossfeld, S. Buchholz, J. Skopek, and M. Triventi, XXXI–XXXII. Edward Elgar Publishing.

Bonefeld, M. 2022. "Reflexion Eigener Stereotype als Motor zur Nachhaltigen Stereotypreduktion bei Angehenden Lehrkräften." In *Stereotype in der Schule II: Ursachen und Möglichkeiten der Intervention*, edited by S. Glock, 341–377. Springer Fachmedien Wiesbaden.

Bonefeld, M., and O. Dickhäuser. 2018. "(Biased) Grading of Students' Performance: Students' Names, Performance Level, and Implicit Attitudes." *Frontiers in Psychology* 9 (481): 1–13. https://doi.org/10.3389/fpsyg.2018.00481.

Brandmiller, C., H. Dumont, and M. Becker. 2020. "Teacher Perceptions of Learning Motivation and Classroom Behavior: The Role of Student Characteristics." *Contemporary Educational Psychology* 63 (101893): 1–36. https://doi.org/10.1016/j.cedpsych.2020.101893.

Burić, I., and L. E. Kim. 2020. "Teacher Self-Efficacy, Instructional Quality, and Student Motivational Beliefs: An Analysis Using Multilevel Structural Equation Modeling." *Learning and Instruction* 66:101302. https://doi.org/10.1016/j.learninstruc.2019.101302.

Canaan, S. 2020. "The Long-Run Effects of Reducing Early School Tracking." *Journal of Public Economics* 187 (104206): 1–17. https://doi.org/10.1016/j.jpubeco.2020.104206.

Canrinus, E. T., M. Helms-Lorenz, D. Beijaard, J. Buitink, and A. Hofman. 2011. "Profiling Teachers' Sense of Professional Identity." *Educational Studies* 37 (5): 593–608. https://doi.org/10.1080/03055698.2010.539857.

Cheadle, J. E., and P. R. Amato. 2011. "A Quantitative Assessment of Lareau's Qualitative Conclusions About Class, Race, and Parenting." *Journal of Family Issues* 32 (5): 679–706. https://doi.org/10.1177/0192513X10386305.

Chwastek, S., B. Leyendecker, A. Heithausen, C. Ballero Reque, and J. Busch. 2021. "Pre-School Teachers' Stereotypes and Self-Efficacy Are Linked to Perceptions of Behavior Problems in Newly Arrived Refugee Children." *Frontiers in Psychiatry* 11 (January): 1–12. https://doi.org/10.3389/fpsyt.2020.574412.

Combette, L. T., E. Camenen, J. Y. Rotge, and L. Schmidt. 2021. "Identified Motivation as a Key Factor for School Engagement During the Covid-19 Pandemic-Related School Closure." *Frontiers in Psychology* 12:752650. https://doi.org/10.3389/fpsyg.2021.752650.

Dæhlen, M. 2015. "School Performance and Completion of Upper Secondary School in the Child Welfare Population in Norway." *Nordic Social Work Research* 5 (3): 244–261. https://doi.org/10.1080/2156857X.2015.1042019.

Dickert, J., and S. Glock. 2025. "Exploring the Role of Parental Education Level in Preservice Teachers' Judgments." *The Journal of Experimental Education*: 1–16. https://doi.org/10.1080/00220973.2025.2459383.

Dodson, L. 2013. "Stereotyping Low-Wage Mothers Who Have Work and Family Conflicts." *Journal of Social Issues* 69 (2): 257–278. https://doi.org/10.1111/josi.12014.

Doyle, L., M. J. Easterbrook, and P. R. Harris. 2023. "Roles of Socioeconomic Status, Ethnicity and Teacher Beliefs in Academic Grading." *British Journal of Educational Psychology* 93 (1): 91–112. https://doi.org/10.1111/bjep.12541.

Dunkake, I., and C. Schuchart. 2015. "Stereotypes and Teacher Characteristics as an Explanation for the Class-Specific Disciplinary Practices of Pre-Service Teachers." *Teaching and Teacher Education* 50:56–69. https://doi.org/10.1016/j.tate.2015.04.005.

Eagly, A. H., and S. Chaiken. 1993. *The Psychology of Attitudes*. Harcourt Brace Jovanovich.

Fehringer, B. C. O. F., M. Bonefeld, and F. Schunk. 2025. "Bias Awareness in Teachers: A German Adaptation of the Bias Awareness Scale for Teachers." *Social Psychology of Education* 28 (1): 71. https://doi.org/10.1007/s11218-025-10016-w.

Fiske, S. T., A. J. C. Cuddy, P. Glick, and J. Xu. 2002. "A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow from Perceived Status and Competition." *Journal of Personality and Social Psychology* 82 (6): 878–902. https://doi.org/10.1037/0022-3514.82.6.878 .

Fiske, S. T., and S. L. Neuberg. 1990. "A Continuum of Impression Formation from Category-Based to Individuating Processes: Influences of Information and Motivation on Attention and Interpretation." *Advances in Experimental Social Psychology* 23 (C): 1–74.

Francis, B., C. Skelton, and B. Read. 2010. "The Simultaneous Production of Educational Achievement and Popularity: How Do Some Pupils Accomplish It?" *British Educational Research Journal* 36 (2): 317–340. https://doi.org/10.1080/01411920902919265.

Fray, L., and J. Gore. 2018. "Why People Choose Teaching: A Scoping Review of Empirical Studies, 2007–2016." *Teaching and Teacher Education* 75:153–163. https://doi.org/10.1016/j.tate.2018.06.009.

Gentrup, S., G. Lorenz, C. Kristen, and I. Kogan. 2020. "Self-Fulfilling Prophecies in the Classroom: Teacher Expectations, Teacher Feedback and Student Achievement." *Learning and Instruction* 66:101296. https://doi.org/10.1016/j.learninstruc.2019.101296.

Gentrup, S., M. Olczyk, and G. Lorenz. 2024. "Teacher Stereotypes and Teacher Expectations at the Intersection of Student Gender and Socioeconomic Status." *Zeitschrift Für Entwicklungspsychologie Und Pädagogische Psychologie* 56 (1–2): 87–102. https://doi.org/10.1026/0049-8637/a000291.

Gibson, S., and M. H. Dembo. 1984. "Teacher Efficacy: A Construct Validation." *Journal of Educational Psychology* 76 (4): 569–582. https://doi.org/10.1037/0022-0663.76.4.569.

Gilbert, D. T., and J. G. Hixon. 1991. "The Trouble of Thinking: Activation and Application of Stereotypic Beliefs." *Journal of Personality and Social Psychology* 60 (4): 509–517. https://doi.org/10.1037/0022-3514.60.4.509.

Glock, S., J. Dickert, and H. Kleen. 2025. "Students' Gender and Social Background: Intersectional and Dominance Effects in Preservice Teachers' Stereotypical Judgments." *Basic and Applied Social Psychology* 47 (6): 351–360. https://doi.org/10.1080/01973533.2025.2527110.

Glock, S., and H. Kleen. 2017. "Gender and Student Misbehavior: Evidence from Implicit and Explicit Measures." *Teaching and Teacher Education* 67:93–103. https://doi.org/10.1016/j.tate.2017.05.015.

Glock, S., and H. Kleen. 2020. "Preservice Teachers' Attitudes, Attributions, and Stereotypes: Exploring the Disadvantages of Students from Families with Low Socioeconomic Status." *Studies in Educational Evaluation* 67:100929. https://doi.org/10.1016/j.stueduc.2020.100929.

Glock, S., and H. Kleen. 2022. "A Look into Preservice Teachers' Responses to Students' Misbehavior: What Roles Do Students' Gender and Socioeconomic Status Play?" *Studies in Educational Evaluation* 75:101207. https://doi.org/10.1016/j.stueduc.2022.101207.

Glock, S., and H. Kleen. 2023. "Disentangling the Confounding Effects of Students' Ethnicity and Socioeconomic Background on Preservice Teachers' Judgments." *International Journal of Intercultural Relations* 95:101830. https://doi.org/10.1016/j.ijintrel.2023.101830.

Glock, S., S. Krolak-Schwerdt, and T. Hörstermann. 2016. "The Higher the SES the Better? Implicit and Explicit Attitudes Influence Preservice Teachers´ Judgments of Students." In *Stereotypes and Stereotyping: Misperceptions, Perspectives and Role of Social Media*, edited by C. Fields, 1–21. Nova Science Publishers.

Glock, S., A. Oude Groote Beverborg, and B. C. N. Müller. 2016. "Pre-Service Teachers' Implicit and Explicit Attitudes Toward Obesity Influence Their Judgments of Students." *Social Psychology of Education* 19 (1): 97–115. https://doi.org/10.1007/s11218-015-9315-9.

Gorard, S., O. Maria Ventista, R. Morris, and B. H. See. 2023. "Who Wants to Be a Teacher? Findings from a Survey of Undergraduates in England." *Educational Studies* 49 (6): 914–936. https://doi.org/10.1080/03055698.2021.1915751.

Hachfeld, A., S. Schroeder, Y. Anders, A. Hahn, and M. Kunter. 2012. "Multikulturelle Überzeugungen: Herkunft oder Überzeugung? Welche Rollen spielen der Migrationshintergrund und multikulturelle Überzeugungen für das Unterrichten von Kindern mit Migrationshintergrund?" *Zeitschrift Für Pädagogische Psychologie* 26 (2): 101–120. https://doi.org/10.1024/1010-0652/a000064.

Han, J., and H. Yin. 2016. "Teacher Motivation: Definition, Research Development and Implications for Teachers." *Cogent Education* 3 (1): 1217819. https://doi.org/10.1080/2331186X.2016.1217819 .

Hartl, A., and D. Holzberger. 2022. "Identifying Teachers' Motivational Profiles and Their Changes from Teacher Education into Practice: A Longitudinal Study." *Zeitschrift für Erziehungswissenschaft* 25 (2): 427–451. https://doi.org/10.1007/s11618-022-01093-0.

Heinz, M. 2015. "Why Choose Teaching? An International Review of Empirical Studies Exploring Student Teachers' Career Motivations and Levels of Commitment to Teaching." *Educational Research and Evaluation: An International Journal on Theory and Practice* 21 (3): 258–297. https://doi.org/10.1080/13803611.2015.1018278.

Heinz, M., and E. Keane. 2018. "Socio-Demographic Composition of Primary Initial Teacher Education Entrants in Ireland." *Irish Educational Studies* 37 (4): 523–543. https://doi.org/10.1080/03323315.2018.1521731.

Hennessy, J., and R. Lynch. 2017. ""I Chose to Become a Teacher Because". Exploring the Factors Influencing Teaching Choice Amongst Pre-Service Teachers in Ireland." *Asia-Pacific Journal of Teacher Education* 45 (2): 106–125. https://doi.org/10.1080/1359866X.2016.1183188.

Heyder, A., and U. Kessels. 2013. "Is School Feminine? Implicit Gender Stereotyping of School as a Predictor of Academic Achievement." *Sex Roles* 69 (11–12): 605–617. https://doi.org/10.1007/s11199-013-0309-9.

Heyder, A., and U. Kessels. 2017. "Boys Don't Work? On the Psychological Benefits of Showing Low Effort in High School." *Sex Roles* 77 (1–2): 72–85. https://doi.org/10.1007/s11199-016-0683-1.

Hughes, B. T., R. Jacobson, N. O. Rule, and S. Srivastava. 2025. "Stereotypes and Social Decisions: The Interpersonal Consequences of Socioeconomic Status." *Journal of Personality and Social Psychology* 128 (5): 1226–1242. https://doi.org/10.1037/pspp0000541.

Jeynes, W. H. 2005. "A Meta-Analysis of the Relation of Parental Involvement to Urban Elementary School Student Academic Achievement." *Urban Education* 40 (3): 237–269. https://doi.org/10.1177/0042085905274540.

Jussim, L., J. Eccles, and S. J. Madon. 1996. "Social Perception, Social Stereotypes, and Teacher Expectations: Accuracy and the Quest for the Powerful Self-Fulfilling Prophecy." In *Advances in Experimental Social Psychology*, edited by M. P. Zanna, 281–388. 28th ed. Academic Press. https://doi.org/10.1016/S0065-2601(08)60240-3.

Kast, J., K. T. Lindner, A. Gutschik, and S. Schwab. 2021. "Austrian Teachers' Attitudes and Self-Efficacy Beliefs Regarding At-Risk Students During Home Learning Due to COVID-19." *European Journal of Special Needs Education* 36 (1): 114–126. https://doi.org/10.1080/08856257.2021.1872849.

Keane, E., M. Heinz, and A. Lynch. 2023. "Identity Matters? 'Working Class' Student Teachers in Ireland, the Desire to Be a Relatable and Inclusive Teacher, and Sharing the Classed Self." *International Journal of Inclusive Education* 27 (3): 337–353. https://doi.org/10.1080/13603116.2020.1853255.

Khattab, N. 2003. "Explaining Educational Aspirations of Minority Students: The Role of Social Capital and Students' Perceptions." *Social Psychology of Education* 6 (4): 283–302. https://doi.org/10.1023/A:1025671617454.

Kilınç, A., H. M. G. Watt, and P. W. Richardson. 2012. "Factors Influencing Teaching Choice in Turkey." *Asia-Pacific Journal of Teacher Education* 40 (3): 199–226. https://doi.org/10.1080/1359866X.2012.700048.

Kirkøen, B., T. Engell, I. B. Follestad, S. Holen, and K. A. Hagen. 2021. "Early Academic Struggles Among Children with Home-Based Support from Child Welfare Services." *Children and Youth Services Review* 131:131. https://doi.org/10.1016/j.childyouth.2021.106268.

Kite, M. E., and B. E. Withley. 2016. *Psychology of Prejudice and Discrimination*. Routledge.

Klemenz, S., S. Tachtsoglou, M. Lünnemann, K. Darge, J. König, and M. Rothland. 2014. *EMW: Entwicklung von berufsspezifischer Motivation und pädagogischem Wissen in der Lehrerausbildung. [EMU: Development of Occupational Motivation and Pedagogical Knowledge in Teacher Education]*. Universität Zu Köln. https://kups.ub.uni-koeln.de/10045/1/Klemenz_Tachtsoglou_et_al_EMW_MZP2_Codebook.pdf.

Klusmann, U., U. Trautwein, O. Lüdtke, M. Kunter, and J. Baumert. 2009. "Eingangsvoraussetzungen beim Studienbeginn: Werden die Lehramtskandidaten unterschätzt? [Cognitive and Psychosocial Characteristics Upon Entry into Teacher Training: Are Teacher Candidates Underestimated?]." *Zeitschrift Für Padagogische Psychologie* 23 (34): 265–278. https://doi.org/10.1024/1010-0652.23.34.265.

König, J., and M. Rothland. 2013. "Pädagogisches Wissen und berufsspezifische Motivation am Anfang der Lehrerausbildung. Zum Verhältnis von kognitiven und nicht-kognitiven Eingangsmerkmalen von Lehramtsstudierenden [Pedagogical knowledge and job-specific motivation at the beginning of teac." *Zeitschrift Für Pädagogik* 59 (1): 43–65. https://doi.org/10.25656/01//.

Koutrouba, K., E. Antonopoulou, G. Tsitsas, and E. Zenakou. 2009. "An Investigation of Greek Teachers' Views on Parental Involvement in Education." *School Psychology International* 30 (3): 311–328. https://doi.org/10.1177/0143034309106497.

Kundu, A., Y. Liu, and J. Ahn. 2023. ""I Got It from My Mama:" The Influence of Working-Class Parents on Young People's Cultural Capital for Success in School and Work." *Equity in Education & Society* 3 (3): 297–316. https://doi.org/10.1177/27526461231170233.

Lindqvist, A., F. Björklund, and M. Bäckström. 2017. "The Perception of the Poor: Capturing Stereotype Content with Different Measures." *Nordic Psychology* 69 (4): 231–247. https://doi.org/10.1080/19012276.2016.1270774.

Lintner, T. 2022. "A Social Network Perspective on Formation of Peer Relationships in Czech Lower-Secondary Classrooms." *Issues in Educational Research* 32 (1): 182–204.

Liu, J., P. Peng, B. Zhao, and L. Luo. 2022. "Socioeconomic Status and Academic Achievement in Primary and Secondary Education: A Meta-Analytic Review." *Educational Psychology Review* 34 (4): 2867–2896. https://doi.org/10.1007/s10648-022-09689-y.

Louie, N., A. P. Adiredja, and N. Jessup. 2021. "Teacher Noticing from a Sociopolitical Perspective: The FAIR Framework for Anti-Deficit Noticing." *ZDM – Mathematics Education* 53 (1): 95–107. https://doi.org/10.1007/s11858-021-01229-2.

Macrae, C. N., and G. V. Bodenhausen. 2000. "Social Cognition: Thinking Categorically About Others." *Annual Review of Psychology* 51 (1): 93–120. https://doi.org/10.1146/annurev.psych.51.1.93.

Manuel, J., and J. Hughes. 2006. "'It Has Always Been My Dream': Exploring Pre-Service Teachers' Motivations for Choosing to Teach." *Teacher Development* 10 (1): 5–24. https://doi.org/10.1080/13664530600587311.

Mavropoulou, S., and S. Padeliadu. 2002. "Teachers' Causal Attributions for Behaviour Problems in Relation to Perceptions of Control." *Educational Psychology* 22 (2): 191–202. https://doi.org/10.1080/01443410120115256.

Mehmet, A. Y., Y. Isa, and A. Durdağı. 2022. "Motivation Factors of Candidates Teachers for Their Professions." *GIST Education and Learning Research Journal* 24:43–63. https://doi.org/10.26817/16925777.1319.

Muntoni, F., and J. Retelsdorf. 2018. "Gender-Specific Teacher Expectations in Reading—The Role of Teachers' Gender Stereotypes." *Contemporary Educational Psychology* 54:212–220. https://doi.org/10.1016/j.cedpsych.2018.06.012.

Pit-ten Cate, I. M., S. Rivas, and G. Busana. 2021. "Increasing the Diversity of the Teacher Workforce: Socio-Political Challenges to Reducing Inequalities in Access to Teacher Education Programs." *Frontiers in Education* 6 (May): 1–10. https://doi.org/10.3389/feduc.2021.685113.

Pop, M. M., and J. E. Turner. 2009. "To Be or Not to Be a Teacher? Exploring Levels of Commitment to Perceptions of Teaching Among Students Enrolled in a Teacher Education Program." *Teachers and Teaching* 15 (6): 683–700. https://doi.org/10.1080/13540600903357017.

Retelsdorf, J., and J. Möller. 2012. "Grundschule oder Gymnasium? Zur Motivation ein Lehramt zu studieren [Primary or Secondary School? On the Motivation for Choosing Teacher Education]." *Zeitschrift Für Pädagogische Psychologie* 26 (1): 5–17. https://doi.org/10.1024/1010-0652/a000056.

Savage, C., A. Ayaita, N. Hübner, and M. Biewen. 2021. "Who Chooses Teacher Education and Why? Evidence from Germany." *Educational Researcher* 50 (7): 483–487. https://doi.org/10.3102/0013189X211000758.

Scheiner, T. 2021. "Towards a More Comprehensive Model of Teacher Noticing." *ZDM - Mathematics Education* 53 (1): 85–94. https://doi.org/10.1007/s11858-020-01202-5.

Scheiner, T. 2022. "Exploring Deficit-Based and Strengths-Based Framings in Noticing Student Mathematical Thinking." Proceedings of the 45th Conference of the International Group for the Psychology of Mathematics Education, edited by C. Fernández, S. Llinares, A. Gutiérrez and N. Planas, Vol. 3, 395–402. PME.

Schofield, T., A. Suomi, and P. Butterworth. 2022. "One 'Welfare Recipient' Stereotype or Many? Using the Stereotype Content Model to Examine the Stereotypes of Different Categories of Benefit Recipients." *International Journal of Social Welfare* 31 (3): 280–290. https://doi.org/10.1111/ijsw.12519.

Schuchart, C., and I. Dunkake. 2014. "Schichtspezifische Stereotype Unter Angehenden Lehrkräften [Social Class Specific Stereotypes Among Future Teachers]." *Zeitschrift Für Soziologie Der Erziehung Und Sozialisation* 34 (1): 89–107.

Schwartz, S. H., and J. A. Howard. 1984. "Internalized Values as Motivators of Altruism." In *Development and Maintenance of Prosocial Behavior - International Perspectives on Positive Morality*, edited by E. Staub, D. Bar-Tal, J. Karylowski, and J. Reykowski, 229–255. Springer US. https://doi.org/10.1007/978-1-4613-2645-8.

Şengönül, T. 2022. "A Review of the Relationship Between Parental Involvement and Children's Academic Achievement and the Role of Family Socioeconomic Status in This Relationship." *Pegem Egitim ve Ogretim Dergisi* 12 (2): 32–57. https://doi.org/10.47750/pegegog.12.02.04.

Smith, E. R. 1998. "Mental Representation and Memory." In *Handbook of Social Cognition*, edited by D. T. Gilbert, S. T. Fiske, and G. Lindzey, 391–445. McGraw-Hill.

Stellmacher, A., S. Ohlemann, J. Pfetsch, and A. Ittel. 2020. "Pre-Service Teacher Career Choice Motivation: A Comparison of Vocational Education and Training Teachers and Comprehensive School Teachers in Germany." *International Journal for Research in Vocational Education and Training* 7 (2): 214–236. https://doi.org/10.13152/IJRVET.7.2.5.

Stone, P., and L. A. Hernandez. 2013. "The All-or-Nothing Workplace: Flexibility Stigma and "Opting Out" Among Professional-Managerial Women." *Journal of Social Issues* 69 (2): 235–256. https://doi.org/10.1111/josi.12013.

Stull, J. 2013. "Family Socioeconomic Status, Parent Expectations, and a Child's Achievement." *Research in Education* 90 (1): 53–67. https://doi.org/10.7227/RIE.90.1.4.

Suomi, A., T. Schofield, N. Haslam, and P. Butterworth. 2022. "Is Unemployment Benefit Stigma Related to Poverty, Payment Receipt, or Lack of Employment? A Vignette Experiment About Australian Views." *Analyses of Social Issues and Public Policy* 22 (2): 694–711. https://doi.org/10.1111/asap.12313.

Taylor, S. E., J. Crocker, and J. D'Agostino. 1978. "Schematic Bases of Social Problem-Solving." *Personality and Social Psychology Bulletin* 4 (3): 447–451. https://doi.org/10.1177/014616727800400318.

Thornberg, R., L. Wänström, H. Lindqvist, M. Weurlander, and A. Wernerson. 2023. "Motives for Becoming a Teacher, Coping Strategies and Teacher Efficacy Among Swedish Student Teachers." *European Journal of Teacher Education*: 1–19. https://doi.org/10.1080/02619768.2023.2175665.

Tiedemann, J. 2002. "Teachers' Gender Stereotypes as Determinants of Teacher Perceptions in Elementary School Mathematics." *Educational Studies in Mathematics* 50 (1): 49–62. https://doi.org/10.1023/A:1020518104346.

Tobisch, A., and M. Dresel. 2017. "Negatively or Positively Biased? Dependencies of Teachers' Judgments and Expectations Based on Students' Ethnic and Social Backgrounds." *Social Psychology of Education* 20 (4): 731–752. https://doi.org/10.1007/s11218-017-9392-z.

van Uden, J. M., H. Ritzen, and J. M. Pieters. 2013. "I Think I Can Engage My Students. Teachers' Perceptions of Student Engagement and Their Beliefs About Being a Teacher." *Teaching and Teacher Education* 32:43–54. https://doi.org/10.1016/j.tate.2013.01.004.

Villegas, A. M., and J. J. Irvine. 2010. "Diversifying the Teaching Force: An Examination of Major Arguments." *Urban Review* 42 (3): 175–192. https://doi.org/10.1007/s11256-010-0150-1.

Watt, H. M. G., and P. W. Richardson. 2007. "Motivational Factors Influencing Teaching as a Career Choice: Development and Validation of the FIT-Choice Scale." *The Journal of Experimental Education* 75 (3): 167–202. https://doi.org/10.3200/JEXE.75.3.167-202.

Whiteford, C., N. Kelly, and L. Dawes. 2021. "Why Become a Teacher? Exploring Motivations for Becoming Science and Mathematics Teachers in Australia." *Australian Journal of Teacher Education* 46 (3): 1–19. https://doi.org/10.14221/ajte.2021v46n3.1.

Yendell, O., C. Claus, M. Bonefeld, and K. Karst. 2023. "I Wish I Could Say, 'Yeah, Both the Same'": Cultural Stereotypes and Individual Differentiations of Preservice Teachers About Different Low Socioeconomic Origins." *Social Psychology of Education* 27 (3): 777–812. https://doi.org/10.1007/s11218-023-09815-w.

Yüce, K., E. Y. Şahin, Ö. Koçer, and F. Kana. 2013. "Motivations for Choosing Teaching as a Career: A Perspective of Pre-Service Teachers from a Turkish Context." *Asia Pacific Education Review* 14 (3): 295–306. https://doi.org/10.1007/s12564-013-9258-9.

Appendix

Vignettes

High-SES student

It is the fifth lesson in your class. Your student, Ben, sits down in his usual place in the back row. When you ask who has not done the homework, no one speaks up. To make sure, you conduct an individual homework check in the class. When you are only a few steps away from Ben's seat, Ben starts rummaging in his bag and avoids looking at you. You realise that Ben has once again failed to do his homework.

You have already tried several times to address this problem by requesting a parent-teacher meeting. However, this appointment has never materialised because Ben's mother has to look after his siblings, and his father, who works as a school principal, has never shown up.

[Es ist die fünfte Stunde Ihrer Klasse. Ihr Schüler Ben setzt sich wie gewohnt an seinen Platz in der hintersten Reihe. Nachdem Sie sich erkundigt haben, wer die Hausaufgaben nicht gemacht hat, meldet sich niemand. Zur Sicherheit beginnen Sie eine individuelle Hausaufgabenkontrolle durch die Klasse. Als Sie nur noch wenige Schritte von Bens Platz entfernt sind, fängt Ben an, in seiner Tasche zu wühlen und meidet Ihren Blickkontakt. Sie stellen fest, dass Ben seine Hausaufgaben zum wiederholten Male nicht gemacht hat.

Mehrfach haben Sie bereits versucht, dieses Problem beim Elternsprechtag anzusprechen. Dieser Termin ist aber nie zustande gekommen, da Bens Mutter auf seine Geschwister aufpassen muss und sein Vater, der als Schulleiter arbeitet, bisher nie erschienen ist.]

Low-SES student

It is the fifth lesson in your class. Your student, Ben, sits down in his usual place in the back row. When you ask who has not done the homework, no one speaks up. To make sure, you conduct an individual homework check in the class. When you are only a few steps away from Ben's seat, Ben starts rummaging in his bag and avoids looking at you. You realise that Ben has once again failed to do his homework.

You have already tried several times to address this problem by requesting a parent-teacher meeting. However, this appointment has never materialised because Ben's mother has to look after his siblings, and his father, who works as a taxi driver, has never shown up.

[Es ist die fünfte Stunde Ihrer Klasse. Ihr Schüler Ben setzt sich wie gewohnt an seinen Platz in der hintersten Reihe. Nachdem Sie sich erkundigt haben, wer die Hausaufgaben nicht gemacht hat, meldet sich niemand. Zur Sicherheit beginnen Sie eine individuelle Hausaufgabenkontrolle durch die Klasse. Als Sie nur noch wenige Schritte von Bens Platz entfernt sind, fängt Ben an, in seiner Tasche zu wühlen und meidet Ihren Blickkontakt. Sie stellen fest, dass Ben seine Hausaufgaben zum wiederholten Male nicht gemacht hat.

Mehrfach haben Sie bereits versucht, dieses Problem beim Elternsprechtag anzusprechen. Dieser Termin ist aber nie zustande gekommen, da Bens Mutter auf seine Geschwister aufpassen muss und sein Vater, der als Taxifahrer arbeitet, bisher nie erschienen ist.]

Welfare student

It is the fifth lesson in your class. Your student, Ben, sits down in his usual place in the back row. When you ask who has not done the homework, no one speaks up. To make sure, you conduct an individual homework check in the class. When you are only a few steps away from Ben's seat, Ben starts rummaging in his bag and avoids looking at you. You realise that Ben has once again failed to do his homework.

You have already tried several times to address this problem by requesting a parent-teacher meeting. However, this appointment has never materialised because Ben's mother has to look after his siblings, and his father, who is on social welfare, has never shown up.

[Es ist die fünfte Stunde Ihrer Klasse. Ihr Schüler Ben setzt sich wie gewohnt an seinen Platz in der hintersten Reihe. Nachdem Sie sich erkundigt haben, wer die Hausaufgaben nicht gemacht hat, meldet sich niemand. Zur Sicherheit beginnen Sie eine individuelle Hausaufgabenkontrolle durch die Klasse. Als Sie nur noch wenige Schritte von Bens Platz entfernt sind, fängt Ben an, in seiner Tasche zu wühlen und meidet Ihren Blickkontakt. Sie stellen fest, dass Ben seine Hausaufgaben zum wiederholten Male nicht gemacht hat.

Mehrfach haben Sie bereits versucht, dieses Problem beim Elternsprechtag anzusprechen. Dieser Termin ist aber nie zustande gekommen, da Bens Mutter auf seine Geschwister aufpassen muss und sein Vater als Sozialhilfeempfänger bisher nie erschienen ist.]