



Research paper

Teachers' job satisfaction and students' meta-perspectives of relationship quality: Exploring the mediating role of job performance

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ABSTRACT

Teacher job satisfaction is a growing international concern, with evidence linking declining satisfaction to reduced well-being and poorer classroom functioning. Drawing on Broaden-and-Build Theory and Social Exchange Theory, job satisfaction is conceptualised as a psychological resource that supports teachers' job performance, with implications for students' perceptions of teacher-student relationship quality. We examined whether job performance helps explain the association between teachers' job satisfaction and student-reported relationship quality. Data were collected from teachers ($N = 36$) and students ($N = 159$) in six secondary schools in the East of England via a questionnaire. Job satisfaction showed indirect associations with all student-rated relationship dimensions: positively via teaching efficacy and positive affect, and negatively via workload stress. These findings highlight how students' interpretations of teachers' enacted job performance relate to perceptions of relationship quality in the classroom.

1. Introduction

International education systems are experiencing a severe teacher recruitment and retention crisis (Symeonidis et al., 2025). Recent estimates suggest that around 44 million additional teachers will be needed to meet the United Nations goal of universal primary and secondary education by 2030 (Sustainable Development Goal 4 [SDG 4]; United Nations Educational Scientific and Cultural Organization [UNESCO], 2024). High attrition, particularly among early career teachers, intensifies this challenge with one in five teachers under 30 years of age planning to leave the profession within five years (Organisation for Economic Co-operation and Development [OECD], 2024). However, teachers who are satisfied with their jobs are five times less likely to want to leave teaching within this period than their unsatisfied colleagues (OECD, 2024). Considering such findings, we propose that job satisfaction functions not only as a consequence of workplace experiences but also as a resource that fuels teachers' professional capacities and functioning.

Guided by Broaden-and-Build Theory (Fredrickson, 1998, 2001) we

argue that job satisfaction can act as a positive emotional resource that broadens teachers' thought-action repertoires and builds resources that can be drawn upon in classroom practice. We contend that these psychological and social resource building processes are particularly important within the classroom, where teachers' moment-to-moment interactions affect both instructional quality and the relational climate. Accordingly, our objective was to examine whether teachers' job satisfaction is associated with students' perceptions of teacher-student relationship quality, and to explore the role of teachers' professional functioning, specifically teacher efficacy, workload stress, and positive affect, in this association. In line with this objective, we sought to address: i) how teachers' job satisfaction is related to students' perceptions of teacher-student relationship quality; and ii) the extent to which teacher efficacy, workload stress, and positive affect account for the ways in which teachers' job satisfaction relates to students' perceptions of relationship quality. The significance of this work lies in its potential to illuminate how teachers' job satisfaction may support aspects of their professional performance, and how high-quality teacher-student relationships may reflect the benefits generated through

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teachers' everyday behaviours and social exchanges.

1.1. Teacher recruitment and retention: international and national perspectives

Teacher recruitment and retention are pressing challenges in education systems worldwide (Symeonidis et al., 2025; UNESCO, 2024). Recent international evidence highlights a growing misalignment between rising job demands and teachers' capacity to sustain their well-being, with many education systems reporting increasing workload pressures, stress, and declining professional attractiveness as key factors (OECD, 2024; UNESCO, 2024). These conditions are now widely identified as barriers to achieving high-quality teaching and learning and are recognised within the broader global concern about meeting the United Nations' SDG 4. Similar pressures and concerns also affect national policy landscapes. For example, in England, data indicate significant challenges in recruiting and retaining teachers (Long & Bridges, 2026; OECD, 2024). In 2023, 9% of teachers in England left the profession, a rate more than three times higher than in France and Ireland, with only Lithuania, Denmark, and Estonia reporting higher proportions of teachers leaving (OECD, 2024). Moreover, teacher departure patterns in the UK differ markedly from those in most other OECD nations; whereas attrition elsewhere is more evenly divided between retirement and other forms of exit, over 90% of departures in the UK occur prior to retirement. This represents the highest share of non-retirement leavers across the countries examined and underscores the severity of the retention issue.

Teacher recruitment in England also remains an issue, and a range of government initiatives, including bursaries and scholarships for training in particular subject areas, targeted retention incentive payments, the early career teacher entitlement, student loan reimbursement programme, and a workload reduction taskforce, have been implemented to address the issues (Department for Education, 2024; Long & Bridges, 2026). Although such initiatives operate within a nationally defined policy framework, their enactment and day-to-day experience vary across schools in response to local organisational and labour-market conditions, such as school size, geographic dispersion, and the availability of alternative employment. This combination of shared national policy conditions and locally variable experiences characterises teachers' working lives across England. Collectively, these national initiatives reflect a recognition that improving working conditions is essential not only for recruitment and retention, but also for enabling teachers to engage positively and effectively with their students.

Within this landscape, attention has increasingly turned to teachers' psychological experiences such as how satisfied they feel in their roles, how manageable their workload feels, and how confident and emotionally resourced they are in their daily practice (Cervellione et al., 2025; McLean, 2023). Such experiences are not peripheral; they support the extent to which teachers can engage positively with students, remain responsive during instruction, and build the relationally rich classroom environments associated with effective learning. This emerging policy and research interest provides the foundation to examine how job satisfaction, as one key dimension of teachers' psychological experience, may influence their professional functioning and, in turn, students' perceptions of teacher-student relationship quality.

1.2. Broaden-and-Build Theory and social exchange processes in classroom relationship quality

Broaden-and-Build Theory (Fredrickson, 1998, 2001) offers a useful lens through which to explore how psychological processes are associated with professional functioning and classroom relationships. Two central hypotheses form the core of Broaden-and-Build Theory, the first is the broaden-hypothesis in which positive emotions (e.g., joy, satisfaction, interest) are adaptive, active processes that expand teachers' immediate patterns of thinking and acting. Such broadened experiences and awareness help teachers to build enduring physical, cognitive,

social, and psychological resources. Over time, repeated experiences of broadening are proposed to support coping, effective functioning, social connection, and classroom performance, reflecting the build-hypothesis (Fredrickson, 1998; Fredrickson & Kurtz, 2011). In contrast, negative emotions narrow the thought-action repertoire of teachers, placing strain on teachers and limiting their resources, well-being, and coping (Fredrickson & Branigan, 2005).

From this perspective, job satisfaction is conceptualised as a positive work experience that evokes broadened patterns of thinking and action, which are expressed through teachers' job performance. Job performance is, therefore, not treated as an affective outcome per se but a behavioural manifestation of teachers' accumulated resources. Although Broaden-and-Build Theory is commonly applied to affective or relational processes (Burić & Macuka, 2018; Rusu & Colomeischi, 2020), it also offers a coherent framework for understanding how job satisfaction gives rise to observable job performance, with implications for classroom-level relational outcomes. To capture how these behaviours are interpreted within teacher-student relationships, we draw on Social Exchange Theory (Blau, 1964; Thibaut & Kelley, 1959), which conceptualises perceptions of relationship quality as emerging from reciprocal, observable exchanges within ongoing interactions. These frameworks, therefore, provide an integrative extension of relationship quality models by linking teachers' internal professional functioning to relationship quality through students' interpretations of enacted affective and behavioural cues.

1.3. The importance of job satisfaction

Across all work domains (public, private, national, and international), job satisfaction has been found to have a significant positive impact on employees' performance (Judge et al., 2001; Katebi et al., 2022). Research shows that job satisfaction affects job performance, including work absenteeism, retention rates, relationships, and morale (Doan et al., 2023; Lee, 2018; Toropova et al., 2020). Moreover, job satisfaction has a significant impact on employees' overall life quality, yet the most recent Gallup statistics on job satisfaction across the world indicated that just 21% of workers reported themselves to be "engaged" and psychologically attached to their work (a downward trend from previous years), while only 33% of employees reported thriving overall (Harter & Pendell, 2025). This global "state of affairs" on employee job satisfaction resonates with the work domain of schools, with international evidence (OECD, 2024), and government data (Department for Education, 2025), revealing low teacher retention rates and a shortage of qualified teachers; signalling "a vocational crisis" of the teaching profession (European Commission, 2021).

Nonetheless, there is ample evidence that teachers who are satisfied with their job have stronger commitment to the profession (Blömeke et al., 2018; Keese et al., 2022; Li & Yao, 2022), and experience higher levels of well-being, and less stress and burnout (Education Support, 2025; OECD, 2024). Equally important is that students of teachers who are happy with their job are more likely to experience higher levels of well-being and achievement (Burić & Frenzel, 2021; Hennessey et al., 2025). It is plausible that teachers with higher levels of job satisfaction provide better learning opportunities and offer the necessary support to their students (Burić & Moè, 2020; Granziera & Perera, 2019); thus, impacting students' well-being and academic progress (Kunter et al., 2013; Wartenberg et al., 2023). Teachers' job satisfaction is therefore a vital factor in promoting impactful teaching performance (Baluyos et al., 2019), which can be manifested and captured in what teachers do in the classroom and how they experience their workplace (Li et al., 2025).

1.4. Job satisfaction and job performance

The link between job satisfaction and job performance is one of the most extensively researched areas in organisational psychology, dating

back to the Hawthorne studies (Roethlisberger & Dickson, 1939). Although, prior research has positioned job satisfaction as an outcome of teachers' performance (von der Embse et al., 2016; Toropova et al., 2020), the satisfaction-performance association has been theorised in multiple ways, including configurations in which job satisfaction is both an antecedent or an outcome of job performance or has reciprocal relationships (Bandura, 1986; Judge et al., 2001). One of the oldest configurations is that job satisfaction predicts/causes job performance and is grounded in the premise that attitudes and emotions carry behavioural implications, such that positive affect and attitudes experienced at work lead to more favourable job outcomes. Consequently, the conceptualisation of job satisfaction as a construct integrating both affective or emotional components (e.g., enjoyment of teaching) and cognitive or attitudinal components (e.g., intentions to remain in the profession) is central to understanding its links with performance (Judge et al., 2001; Wartenberg et al., 2023). Adopting this perspective aligns with Broaden-and-Build Theory (Fredrickson, 1998, 2001), whereby job satisfaction, as a positive emotional experience, has the capacity to broaden teachers' awareness and enhance personal resources. As such, job satisfaction may function not only as an outcome of teachers' work experiences, but also as a resource that supports effective practice and relationship building in the classroom.

Consistent with this framing and prior work emphasising the value of a broader conceptualisation of job performance (Judge et al., 2001), job performance is viewed as a multidimensional representation of how teachers function in their professional roles, rather than as a single, discrete construct. Teacher self-efficacy, positive affect, and perceived workload stress are distinct aspects of teachers' working lives but together capture how teachers' internal resources and demands are expressed through their day-to-day professional behaviour (Wartenberg et al., 2023). Self-efficacy reflects teachers' confidence in their instructional capability, positive affect their emotional presence, and workload stress the extent to which job demands are experienced as burdensome (Zee & Koomen, 2016). Collectively, these dimensions provide a theoretically coherent account of teachers' functional capacity to engage with students and sustain relational investment. For this reason, teachers' job performance was operationalised via behaviours that were specific to both task performance (efficacy) and organisational performance (workload stress; excitement, pride, happiness), capturing how professional functioning is displayed in practice and experienced by students in their daily interactions in the classroom.

1.5. Relationship quality in the classroom

The classroom is a dynamic social environment in which the experiences of both teachers and students are grounded in the nature and quality of their interpersonal interactions and relationships (Zajda, 2024). Teachers' available attentional, emotional, and behavioural resources play a critical role in shaping the relational dynamics within the classroom (Aldrup et al., 2024; Duan et al., 2024), while students' engagement and motivation are moulded by the emotional expressiveness and interpersonal responsiveness of their teachers (Hofkens & Pianta, 2022). This relational availability of teachers and their responsiveness to students manifests itself in subtle, but meaningful, cues that students are attuned to and interpret as indicators of relationship quality in the classroom.

The teacher-student relationship has been identified as "a cornerstone of development" (Pianta, 1999, p. 185) and for being responsible for a large proportion of school success (Roorda et al., 2011, 2017). Recent conceptual developments in education have applied Jowett's (2007) 3+1Cs conceptual model from sport to gain a more nuanced understanding of how teachers and students interact, influence one another, and co-construct relational meaning in educational settings (Jowett et al., 2023). Using this model, teacher-student relationship quality is defined as a social situation in which a teacher and a student's affective closeness, cognitive commitment, and behavioural

complementarity are mutually interconnected (Jowett et al., 2023).

Within this conceptual framework an important dimension of relationship quality lies in the distinction between direct- and meta-perspectives. From the student's view, the direct perspective aims to capture students' own perceptions about relationship quality. In other words, how they feel (e.g., I respect my teacher), they think (e.g., I am committed to my teacher), and they behave (e.g., I am ready to do my best with my teacher; cf. Jowett & Clark-Carter, 2006; Jowett & Felton, 2024). Drawing on this conceptual perspective, Jowett et al. (2023) provided evidence for the validation of the Teacher-Student Relationship Quality-Questionnaire (TSRQ-Q) to measure students' direct perspectives of relationship quality with their respective teachers. Moreover, across two subject areas they found that students' direct perspective of relationship quality with their teacher predicted enjoyment, perceived competence, and positive affect within mathematics and students' physical self-concept, intrinsic motivation, and positive affect within physical education (Jowett et al., 2023). While these direct perceptions are informative, they overlook an important layer of relational understanding; how individuals believe the other person experiences the relationship.

Such relational understanding is reflected in the meta-perspective of relationship quality, which offers a more socially attuned and interactionally grounded view of relational processes. The meta-perspective is an attempt of one member to try (as accurately as possible) to understand how the other member experiences the relationship quality with them. From the student's view, the meta-perspective aims to capture students' perceptions of their teachers' views about the relationship quality with them. In other words, how they think the teacher feels (e.g., my teacher respects me), thinks (e.g., my teacher is committed to me), and behaves (e.g., when my teacher teaches me, s/he is ready to do their best; cf. Jowett & Clark-Carter, 2006; Jowett & Felton, 2024).

In two-person relationships, the meta-perspective has been found to have an important part in initiating and maintaining relationships (Carlson, 2016) and has led to more satisfying relationships (Lorimer & Jowett, 2009). Indeed, evidence from other domains suggests that students' perceptions of relationship quality are likely to be more influential than teachers' own views or intentions. For example, coach behaviours have been linked to athletes' outcomes via athletes' perceptions of coaches' behaviours (Smith & Smoll, 2007), suggesting that athletes' perceptions are more important than the actual behaviours of the coach. Similarly, studies in education (Jowett et al., 2023) and sport (Adie & Jowett, 2010) demonstrate that perceptions are strong predictors of motivation, performance, and achievement. We, therefore, contend that students' meta-perspective of teacher-student relationship quality can provide a window into not only how much students enjoy the relationship with their teachers, but also into teachers' (in)effective functioning in the classroom.

Such a focus moves beyond the field's tendency to focus on direct perspectives of teacher-student relationship quality towards how teachers' internal resources are translated into the relational experiences that matter most for students' learning and development. However, given the very recent application of Jowett's (2007) 3+1Cs conceptual model to understanding teacher-student relationship quality, there has been no research which offers a validated measurement of the meta-perspectives of student perceptions of relationship quality from this conceptual viewpoint. Therefore, in seeking to address our primary aim it was necessary to provide a validation of the meta-perspective of the TSRQ-Q as a preliminary aspect of the study (Supplementary Material 1).

1.6. Teachers' job satisfaction and students' relationship quality

Recent meta-analytic findings suggest satisfied teachers are more effective at establishing positive student-teacher interactions (Wartenberg et al., 2023). Such findings are also evident across different work/life domains and demonstrate the importance of interpersonal

relationships (e.g., employer-employee, coach-athlete, teacher-student) for performance, satisfaction, and well-being (Jowett, 2017; Jowett et al., 2023; Uhl-Bien, 2006). Drawing on Broaden-and Build Theory, we, therefore, hypothesise that higher levels of teachers' job satisfaction are associated with more positive student meta-perspectives of relationship quality with their respective teacher (H1).

Social Exchange Theory (Blau, 1964; Thibaut & Kelley, 1959), posits that interdependent transactions or social exchanges have the potential to generate high-quality relationships (Cropanzano & Mitchell, 2005). Teachers' job performance is, therefore, conceptualised as a series of social exchanges enacted in the classroom whereby teachers teach and motivate (teaching efficacy), take on extra work (workload stress), and show excitement, pride, and happiness (positive affect) in the classroom. It is plausible that such teacher behaviours are viewed as social exchanges and as relational resources (e.g., caring for students and fulfilling teacher "obligations"), thereby engendering beneficial consequences that strengthen students' sense of connection with their teachers and perceptions that their teachers are connected to them. On this basis we hypothesised that teachers' job performance may mediate the link between teachers' job satisfaction and students' meta-perspectives of teacher-student relationship quality (H2).

Empirical research supports this mediation pathway by demonstrating that teachers' job satisfaction is associated with affective, motivational, and stress-related aspects of professional functioning (Jentsch et al., 2023; Wartenberg et al., 2023). In turn, these aspects of teachers' functioning inform students' perceptions of relationship quality, with teachers' affective displays, instructional confidence, and observable signs of workload strain serving as salient cues for students' interpretations of relational commitment and investment (Frenzel et al., 2021; Zee & Koomen, 2016). These findings support the proposed mediation hypothesis linking teachers' job satisfaction to students' meta-perspectives of relationship quality through teachers' enacted professional functioning.

1.7. Job satisfaction, self-efficacy, and relationship quality in the classroom

There is substantial evidence demonstrating a positive association between teachers' job satisfaction and their sense of self-efficacy (Jentsch et al., 2023; Troesch & Bauer, 2017). Teachers who report higher job satisfaction tend to feel more capable in areas such as instructional practice, classroom management, and influencing student learning (Toropova et al., 2020). Furthermore, research indicates that feeling satisfied and supported in one's role enhances teachers' confidence in their professional abilities rather than the reverse (Burić & Kim, 2021). Such a notion is also consistent with Broaden-and-Build Theory (Fredrickson, 1998, 2001) leading us to hypothesise that higher job satisfaction among teachers is associated with greater perceptions of teaching efficacy (H3).

Self-efficacious teachers tend to demonstrate greater instructional sensitivity, consistency, and responsiveness, with such behaviours being perceived by students as reflecting lower conflict and higher quality in the teacher-student relationship (Summers et al., 2017; Zee et al., 2017). These relational benefits are also evident at the teacher level, with higher quality teacher-student relationships being associated with greater teacher efficacy and personal accomplishment (Bosman et al., 2021; Corbin et al., 2019). Intervention studies that modify teachers' relational representations further underscore the reciprocal links between self-efficacy and relationship quality (Bosman et al., 2021). This pattern of evidence suggests that self-efficacy may manifest itself in teachers' behaviours, such as encouragement, support, and fairness, which affect students' perceptions of relationship quality (Prewett et al., 2019). Accordingly, we hypothesise that higher levels of teachers' self-efficacy are associated with more positive student meta-perspectives of relationship quality, as reflected in day-to-day classroom interactions (H4).

1.8. Job satisfaction, positive affect, and relationship quality in the classroom

Drawing on Broaden-and Build Theory (Fredrickson, 1998, 2001), positive emotional states are understood to expand individuals' thought-action repertoires and contribute to the accumulation of enduring resources. In line with this perspective, research has consistently demonstrated a positive association between job satisfaction and positive affect (Burić & Moè, 2020; Luque-Reca et al., 2022), with satisfied teachers displaying stronger emotional engagement in their classroom interactions (Wartenberg et al., 2023). Feeling satisfied in one's job may therefore initiate a positive spiral of emotions that energises their teaching behaviours in the classroom. Accordingly, we hypothesise that higher job satisfaction is associated with greater feelings of positive affect in teachers (H5).

There is also evidence that teachers' positive emotions can facilitate the teacher-student relationship (Frenzel et al., 2021) due to their interpersonal function and effects on the social interaction partners (students) of those who experience the emotions (teachers; Barrett et al., 2016). This function can trigger emotional contagion in the classroom, increasing students' receptiveness to teachers' behaviours (Frenzel et al., 2009; Pianta, 1999). Positive emotions have been found to have an important role in initiating relationships, helping them develop, and supporting their long-term stability (Chang et al., 2020; Don et al., 2022; Griffith et al., 2021). Teachers' emotional regulation and expression in the classroom acts as a model for students' developing their own emotional regulatory skills and can influence the quality of teacher-student relationships (Pianta, 1999). In contrast, negative emotions can undermine relationship quality and lead to less favourable outcomes (Yee et al., 2014), which can contribute to teachers leaving the profession (Pianta, 1999). Consistent with Broaden-and-Build Theory (Fredrickson, 1998, 2001), when teachers experience joy in their work and hold warm, positive feelings toward their students, these emotions can strengthen teacher-student connections and encourage supportive instructional practices (Frenzel et al., 2021). We, therefore, hypothesise that higher levels of teachers' positive affect are associated with more positive student meta-perspectives of relationship quality (H6).

1.9. Job satisfaction, workload stress, and relationship quality in the classroom

A substantial body of evidence shows an inverse relationship between teachers' job satisfaction and workload related stress (Amitai & Van Houtte, 2022; Jentsch et al., 2023; Troesch & Bauer, 2017). When teachers feel satisfied in their roles, they may feel better equipped to manage heavy workload demands and are less likely to perceive their workload as stressful. It is plausible that higher job satisfaction may buffer teachers against the pressures of high workloads by also enhancing resilience and coping. Thus, in line with Broaden-and-Build Theory (Fredrickson, 1998, 2001), job satisfaction can affect how burdensome classroom workload feels by improving teachers' emotional and psychological resources. Consequently, we hypothesise that higher job satisfaction among teachers is associated with lower perceptions of workload stress, as experienced in everyday classroom interactions (H7).

The consequences of workload stress can leave teachers feeling tired, distracted, unfocused, frustrated, or easily irritated, and these emotional strains may affect how close or conflict-prone their interactions with students become (Ansari et al., 2022; Henry et al., 2023). Teachers are encouraged to form close, supportive relationships with their students, and these bonds play a central role in teacher well-being (Spilt et al., 2011). Teachers' interpretations of everyday interactions, and the importance they place on maintaining positive relationships, affect how stressful they perceive their work to be. Regular positive exchanges tend to enhance well-being, whereas repeated negative interactions can heighten stress and diminish occupational well-being (Spilt et al., 2011).

In early childhood settings, more workplace stress has been associated with more conflict (Gagnon et al., 2019; Whitaker et al., 2015) and lower closeness (Gagnon et al., 2019) in the teacher-student relationship. Consequently, when teachers experience high levels of stress, they are less able to cultivate the warm, supportive relationships with students that are essential to fostering effective learning (Ansari et al., 2022; Henry et al., 2023). We, therefore, hypothesise that higher levels of teachers' workload stress are associated with lower student meta-perspectives of relationship quality (H8).

2. Method

2.1. Setting, recruitment, sampling, and participants

Schools ($N = 18$) from the secondary physical education teacher training partnership of a higher education institution in England were invited to participate in the study via email. Six schools responded to the invitation to participate (33.3%); all were co-educational state secondary schools with academy status and taught children between the ages of 11–16 years ($n = 2$) or 11–18 years ($n = 4$). They were located in villages ($n = 2$), market towns ($n = 2$) and a city ($n = 2$) in the East of England and were small-sized ($n = 2$; less than 600 students), medium-sized ($n = 2$; between 600 and 1500 students) and large-sized secondary schools ($n = 2$; over 1500 students).

All eligible physical education teachers ($N = 41$) were sent a study information sheet, of which 36 agreed to participate (87.8%). The teacher sample ($n = 36$) consisted of 17 females and 19 males, of which 94% were White British. Teachers were aged 23–60 years ($M = 35.47 \pm 9.68$ years) with a teaching experience range of 1–40 years ($M = 11.83 \pm 10.10$ years).

A class for each teacher was selected for inclusion in the study based on the agreed date of data collection. Starting with the first student on the class register, every 5th student was invited to participate in the study and were provided with a parent or legal guardian information sheet and consent form to take home. Only students (with parent or guardian consent) that assented to be part of the study were included. Participants in the student sample ($n = 159$) were in Years 7, 8 and 9 (70 females; 89 males), aged 11–14 years ($M = 13.47 \pm .92$ years), and predominantly White British (92%).

2.2. Data collection procedures

The procedures for both participant groups followed the ethical guidelines of the British Psychological Society and received ethical approval from an institutional ethical advisory committee. Head-teachers and heads of department provided consent for the study to take place in their school and during physical education lessons. Parental consent for students' participation in the study was sought via a parental information sheet. Students and teachers were provided with a written and verbal overview of the study's purpose and procedures before giving their informed consent (teachers) and assent (students). All procedures took place at the start of normal curriculum lessons. Participants were assured that all information collected would be anonymous, would remain confidential, and they had the right to withdraw at any point. A trained research assistant conducted the data collection procedures at each school. Data was collected from students and teachers at the same time. Each participant responded to their respective (i.e., teacher or student) anonymous multi-section questionnaire, which took approximately 15 min to complete.

2.3. Measures

2.3.1. Student survey

Students completed the following measures in their survey:

Demographic Information. The information collected included sex, age, ethnicity, and physical education group.

Teacher-Student Relationship Quality Questionnaire Meta-Perspective. Student's beliefs regarding how their teachers perceived the teacher-student relationship was assessed using the meta-perspective of the TSRQ-Q (Jowett et al., 2023). We drew on the meta-perspective of the Coach-Athlete Relationship Questionnaire (CART-Q; Jowett, 2009) to identify how to adapt the TSRQ-Q items. Students responded to 11 items on a 7-point Likert scale that ranged from *strongly disagree* (1) to *strongly agree* (7) and were asked to respond based on 'how you think your physical education teacher feels about you'. Three subscales were measured: meta-commitment (three items: e.g., my physical education teacher is committed to me), meta-closeness (three items: e.g., my physical education teacher respects me), and meta-complementarity (four items: e.g., my physical education teacher has a friendly character when he/she teaches me).

Each subscale demonstrated acceptable internal validity (meta-closeness $\alpha = .92$, meta-commitment $\alpha = .82$, and meta-complementarity $\alpha = .90$). Given the novel use of this questionnaire in our context and the important role of these constructs as outcomes in the mediation model, we assessed its factorial and convergent validity; the full analytical procedures and results are provided in [Supplementary Material 1](#). Model comparisons of the Confirmatory Factor Analysis indicated that a hierarchical model was the preferred model ($SB\chi^2 = 95.62$, $df = 41$, $p < .05$; CFI = .941; SRMR = .038; RMSEA = .092; RMSEA 90% CI = .068–.116).

2.3.2. Teacher survey

Teachers completed the following measures in their survey:

Demographic Information. The information collected included sex, age, ethnicity, number of years teaching, physical education group, and sex of students in their physical education class.

Job Satisfaction. We measured teachers' overall satisfaction as an affective reaction to their job using three items (Skaalvik & Skaalvik, 2010). Teachers responded to the following items using a 5-point Likert scale: 'all things considered how much do you enjoy working as a teacher?' *Not at all* (1) to *very much* (5); 'if you could choose your occupation today, would you choose to be a teacher?' *No, definitely not* (1) to *yes, without a doubt* (5); and 'have you ever thought about leaving the teaching profession?' *All the time* (1) to *never* (5). The three-item measure demonstrated acceptable internal reliability ($\alpha = .71$) in previous research (Skaalvik & Skaalvik, 2010) and in the current study ($\alpha = .87$).

Workload Stress. Teacher's perception of their workload stress was measured using four items from the Teacher Stress Inventory (TSI; Boyle et al., 1995) which were answered on a 9-point Likert scale ranging from *no stress* (1) to *extremely stressful* (9). Teachers responded to the stem 'as a teacher how great a source of stress are these factors to you?' Example items included having too much work to do and having extra duties/-responsibilities because of absent teachers. The items exhibited acceptable reliability ($\alpha = .68$) and model fit ($\chi^2 = 41$, $df = 13$, $p < .001$; GFI = .971; NNFI = .971; RMSEA = .046; SRMR = .015) in previous research (Klassen & Chiu, 2010) and in the current study ($\alpha = .69$).

Positive Affect. How teacher's felt when teaching physical education was measured using the positive affect items from the short form of the Positive and Negative Affect Scale (PANAS; Mackinnon et al., 1999). Teachers responded to the stem 'when teaching physical education, to what extent do you feel ...', and answered five indicators of positive affect (excited, proud, happy, satisfied, relaxed) on a 5-point Likert scale ranging from *very slightly or not at all* (1) to *extremely* (5). The items exhibited acceptable model fit ($\chi^2 = 294.55$, $df = 32$, $p < .001$; GFI = .978; NNFI = .963; RMSEA = .052) and reliability ($\alpha = .78$) and validity in previous research (Mackinnon et al., 1999) and in the current study ($\alpha = .66$).

Teacher Efficacy. Teacher's confidence in their teaching ability across a range of typical teaching situations was assessed using the Teacher Efficacy Scale in Physical Education (TESPE; Chase et al., 2001). Sixteen items comprising four subscales of motivation, analysis

of skills, preparation, and communication were measured on a 7-point Likert scale ranging from *no confidence* (1) to *very confident* (7). Teachers responded to the stem 'how sure are you about your teaching ability to ...' and answered four items in relation to each subscale. Example items include: adjust your teaching style, when necessary, to motivate your pupils (motivation); analyse what is wrong with a movement (analysis); prepare lesson plans using behavioural objectives that promote learning (preparation); and explain instructional cues and strategies to your pupils in ways that they will understand (communication). The TESPE has demonstrated adequate reliability ($\alpha = .81$) in previous research (Buns & Thomas, 2015) and in the current study ($\alpha = .97$).

2.4. Analytical approach

We assessed the extent and pattern of missing data; less than 1% of data was missing, which was handled via the Full Information Maximum Likelihood procedure in Mplus 8 (8.7, Muthén & Muthén, 2017). Descriptive statistics (means, standard deviations and internal reliability coefficients) were computed for all teacher (job satisfaction, efficacy, positive affect, and work stress) and student variables (meta-closeness, meta-commitment, and meta-complementarity). Pearson's Product-Moment Correlation Coefficients were computed between all study variables.

We conducted a path analysis using the PROCESS procedure, model 4, for SPSS (Version 28) with 10,000 bootstrap resamples and 95% confidence interval (Hayes, 2018) to examine the direct, indirect, and total effects of teachers' job satisfaction on student's meta-perspectives of relationship quality. Analyses were conducted at the student level; intraclass correlation coefficients ranged from .126 to .178 (design effects = 1.42–1.60), indicating modest clustering. We explored how teacher efficacy, positive affect, and work stress mediated the relationship between job satisfaction and student meta-perspectives of relationship quality. Mediation analysis was used to examine theoretically specified indirect associations, not causal effects. Given the modest teacher sample, bias-corrected bootstrapping was applied to improve the stability and precision of indirect effects under small-sample conditions (MacKinnon et al., 2004; Preacher & Hayes, 2008). As such, conclusions emphasise the theoretical plausibility and estimation of indirect effects, with sample size primarily constraining precision.

3. Results

3.1. Descriptive statistics

Table 1 presents the descriptive statistics and correlations of the study variables. All means were above the scale midpoint. The relationship qualities of meta-commitment, meta-closeness, and meta-complementarity demonstrated strong positive correlations with each other (.77 to .87, p 's < .01). Teacher job satisfaction was positively associated with positive affect and teacher efficacy, whilst negatively correlated with workload stress (p 's < .01). Teacher workload stress was positively correlated with meta-closeness, meta-complementarity, positive affect, and teaching efficacy (p 's < .01). Whilst positive affect was positively associated with meta-commitment and teaching efficacy

(p 's < .01). Teacher efficacy and job satisfaction was not significantly associated with any relationship quality dimension (p 's > .05).

3.2. The mediating effects of job performance on the relationship between teacher job satisfaction and student meta-perspectives of relationship quality

Our mediation analyses explored the relationship between teacher job satisfaction and students' meta-perspectives of relationship quality. As shown in Fig. 1, teachers who reported higher levels of job satisfaction reported having higher levels of self-efficacy and positive affect, and lower levels of workload stress. Analysis of the indirect effect of job satisfaction on students' perspectives of relationship quality, through teacher efficacy, workload stress, and positive affect, revealed that teachers' job satisfaction was indirectly associated with all three aspects of students' meta-perspectives of relationship quality.

Specifically, for teacher efficacy (see Table 2), the bias-corrected bootstrap confidence interval for the indirect effect was entirely above zero for student meta-closeness, but not meta-commitment, nor meta-complementarity. For teacher workload stress, it was entirely below zero for student meta-closeness, meta-commitment, and meta-complementarity. While for teachers' positive affect, it was entirely above zero for student meta-closeness, and meta-commitment, but not meta-complementarity.

The total indirect effect of teacher job satisfaction, through teacher efficacy, teacher workload stress, and teacher positive affect, suggests that for every 1 unit increase in teacher job satisfaction, students' beliefs regarding how their teachers perceived the commitment in the teacher-student relationship is increased by .178. There was no total indirect effect of job satisfaction on students' beliefs regarding how their teachers perceived the closeness nor the complementarity in the teacher-student relationship.

There was no evidence of a direct effect of teachers' job satisfaction, independent of its effects on teacher efficacy, teacher workload stress, or teacher positive affect, on students' beliefs regarding how their teachers perceived the closeness, commitment, or complementarity (p 's > .05) in the teacher-student relationship.

4. Discussion

4.1. Teacher job satisfaction and job performance

The present findings contribute to a deeper understanding of the mechanisms linking teachers' job satisfaction to their job performance and psychological functioning. Teachers who reported higher job satisfaction also reported greater teaching efficacy, enhanced positive affect, and reduced workload stress (H3, H5, H7). These patterns demonstrate both theoretical and practical value in applying Broaden-and-Build Theory (Fredrickson, 1998, 2001) and conceptualising job satisfaction as an antecedent to job performance (Judge et al., 2001). From these perspectives, job satisfaction operates as a psychological resource that expands teachers' emotional and cognitive capacities, affecting how they manage demands, engage emotionally, and carry out teaching-related tasks. It is plausible that in teachers whose satisfaction

Table 1
Descriptive statistics and bivariate correlations.

	Range	Mean	SD	1.	2.	3.	4.	5.	6.	7.
1. Meta-Closeness	1-7	5.17	1.36	-						
2. Meta-Commitment	1-7	4.84	1.27	.81**	-					
3. Meta- Complementarity	1-7	5.49	1.33	.87**	.77**	-				
4. Teacher Job Satisfaction	1-5	4.25	.91	-.02	.02	.04	-			
5. Teacher Workload Stress	1-9	5.27	1.58	.24**	.11	.19*	-.20*	-		
6. Teacher Positive Affect	1-5	4.04	.51	.09	.19*	.07	.56**	-.27**	-	
7. Teacher Efficacy	1-7	6.03	.97	.01	.04	.03	.46**	-.41**	.27*	-

Note: ** p < .01; * p < .05.

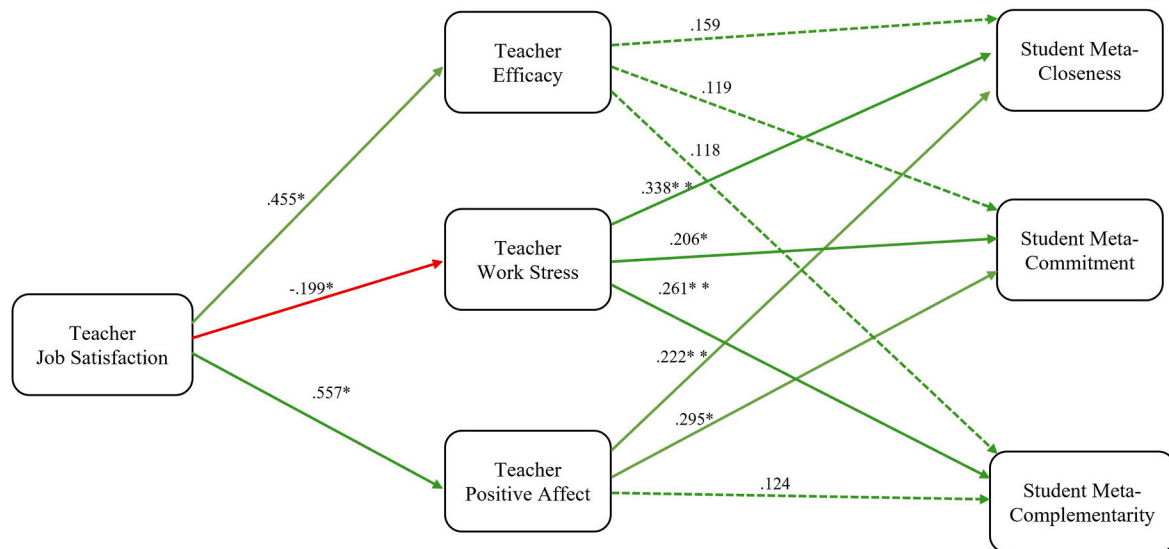


Fig. 1. Path analysis/process model assessing predictive of teacher job satisfaction to teacher efficacy, teacher work stress, teacher positive affect, student meta-closeness, student meta-commitment, and student meta-complementarity. *Note.* Complete lines are significant paths ($p < .01$); dotted lines are non-significant paths ($p > .05$); green is a positive path; red is a negative path. (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)

Table 2

Bootstrapped indirect, total indirect, and direct effects of teacher job satisfaction on students' meta-perspectives of relationship quality through teaching efficacy, workload stress, and positive affect.

Mediator and Outcome	Effect (b)	SE	95% CI (Lower)	95% CI (Upper)
Indirect Effect				
<i>Teaching Efficacy</i>				
Meta-Closeness	.072	.037	.004	.151
Meta-Commitment	.054	.047	-.034	.154
Meta-Complementarity	.054	.036	-.015	.129
<i>Workload Stress</i>				
Meta-Closeness	-.067	.030	-.130	-.014
Meta-Commitment	-.041	.022	-.091	-.005
Meta-Complementarity	-.052	.025	-.105	-.001
<i>Positive Affect</i>				
Meta-Closeness	.124	.052	.028	.228
Meta-Commitment	.164	.054	.065	.277
Meta-Complementarity	.069	.052	-.033	.174
Total Indirect Effect				
Meta-Closeness	.129	.069	-.004	.269
Meta-Commitment	.178	.066	.052	.310
Meta-Complementarity	.071	.068	-.057	.210
Direct Effect				
Meta-Closeness	-.151	.100	-.347	.046
Meta-Commitment	-.155	.101	-.354	.045
Meta-Complementarity	-.035	.102	-.237	.167

with their teaching job is high, this mitigates the effects of workload stress. Our associations also align with previous research which showed that teachers with higher job satisfaction typically demonstrate greater commitment, higher well-being, and more effective coping with job demands (Baluyos et al., 2019; Blömeke et al., 2018).

Moreover, these findings assume wider significance considering national and international concerns surrounding teacher retention, recruitment, and well-being (Department for Education, 2025; OECD, 2024). Declining job satisfaction and increased stress have been consistently linked to teacher attrition and reduced workforce stability (European Commission, 2021; McLean et al., 2024); understanding how job satisfaction relates to teachers' job performance is, therefore, central for any efforts aimed at strengthening and sustaining the teaching profession. The associations observed in this study indicate that job satisfaction acts as a foundational psychological resource that supports

teachers' day-to-day functioning and capacity to meet professional demands. Recognising and supporting these energising psychological resources is essential if schools and policy systems are seeking to develop and retain a well-functioning and resilient teaching workforce.

4.2. Teacher job performance and student perceptions of relationship quality

Associations between teachers' job-performance indicators and students' meta-perspectives of relationship quality showed a differentiated pattern. Teaching efficacy was not related to students' meta-perspectives of closeness, commitment, or complementarity (contrary to H4), a finding that also contrasts with earlier work reporting positive links between efficacy and teacher-student relations (de Jong et al., 2014; Summers et al., 2017). This pattern is, however, consistent with perspectives that assign a central role to teachers' affective states, rather than their competence beliefs, in shaping moment-to-moment interpersonal behaviour. From a Broaden-and-Build Theory perspective, positive emotions, not cognitive judgements about capability, expand social attention and promote behaviours that help initiate or maintain supportive relationships (Fredrickson, 1998, 2001).

Moreover, it is possible that the meta-perspective lens amplifies this distinction since students infer how teachers feel toward them from outward, affect-laden cues (warmth, responsiveness, tone, visible strain), whereas efficacy is an inward-facing belief that is comparatively opaque to observers. While efficacy may facilitate instructional performance and enable teachers to feel able to build relationships, as a belief-based performance resource, it may not inherently generate the emotional energy, warmth, or socioemotional signals that students use to infer relationship quality. In contrast, affective experiences such as high positive affect, low stress, and job satisfaction are more readily observable to students in everyday interactions and are, therefore, more likely to influence their meta-perspective of relational closeness, commitment, and complementarity.

Consistent with this affect-based explanation teachers who felt excited, proud, happy, and enjoyed their work created an emotional presence that students perceived as trust and respect, fostering relational closeness (H6). Those same affective cues also communicated loyalty and optimism regarding students' progress, reinforcing students' perceptions of commitment (H6) in the teacher-student relationship, but

not perceptions of complementarity (contrary to H6). Consequently, teachers' positive affect appears to signal relational investment from the teacher from behaviours such as openness, warmth, and approachability (Aldrup et al., 2024; Pianta & Hamre, 2009). In this way, positive affect guides not only the immediate emotional tone of classroom interactions but also the broader relational climate in providing outward cues that help students feel recognised, supported, and connected in the classroom (McLean et al., 2026; Pianta, 1999). However, these affective displays may be less informative for students' interpretations of responsiveness and receptivity from their teacher because they do not necessarily indicate moment-to-moment behavioural adjustment to students' needs, such as a students' hesitation or uncertainty. Such findings underscore the role of teachers' emotional displays in forming students' sense of connection and engagement in the classroom (Aldrup et al., 2024; Frenzel et al., 2021; McLean et al., 2026).

Interestingly, however, and contrary to our hypothesis (H8) and previous research (Summers et al., 2017; Zee et al., 2017), teachers' workload stress also appeared to carry positive relational meaning for students. Students seemed to interpret signs of pressure or strain as indicators about how teachers felt towards them; reading these behaviours as evidence that teachers were working hard for them. These interpretations fostered feelings that their teacher trusted and respected them (closeness), were loyal and invested in their progress (commitment), and were responsive and attuned to their needs (complementarity). Such a view of students interpreting teachers' workload stress as engagement and involvement, as well as fulfilling their duties and being in charge, is plausible (Carlson, 2016; Lorimer & Jowett, 2009). Although it should be noted that these interpretations occur in the presence of teachers' relatively high levels of job satisfaction, positive affect, and efficacy in the present study. This pattern can be a double-edged sword as it may seemingly have positive effects on students' perceptions of relationship quality but potentially negative effects on teachers' well-being (Bjärehed & Bjärehed, 2025).

Our assumption that job performance variables such as efficacy, workload stress, and positive affect reflect social exchanges or resources, engendering beneficial consequences such that students become more interconnected with their teachers (as their belief is that the teachers are connected to them), was therefore supported. It appears that even when teachers are satisfied with their job and the many demands placed upon them are negatively felt, students may interpret these demands and stressors as an investment (duty and obligation) teachers make to them, strengthening the bond (captured by the 3Cs) the students feel from their teacher (cf. Cropanzano & Mitchell, 2005). In light of research that has highlighted that students have the capacity to note their teachers' levels of stress (burnout) and that teachers who experience stress are more likely to be perceived by students as less emotionally and socially competent (Oberle et al., 2020), we suggest that there may be an inverted-U relationship between teachers' stress and students' perspectives of relationship quality. Thus, there may be a tipping point where teachers' stress or negative emotions start to inversely affect the teacher-student relationship (Frenzel et al., 2020; Yoon, 2002).

The findings of this study provide insight into students' interpretations of their teachers' exchanges and a window into the effectiveness of such exchanges from the teacher. The finding that both teachers' excitement, pride, and happiness (positive affect) and their workload stress (negative emotion) positively contributed to students' perceptions of relationship quality with their teacher supports the importance of teachers' emotions for the development and maintenance of high-quality teacher-student relationships (Frenzel et al., 2021). The effect of students' having established a connection (a good quality relationship) with their teacher means that students are now more likely to return the benefits they have received from them (e.g., energy, excitement, investment; cf. Cropanzano & Mitchell, 2005).

4.3. Job satisfaction and relationship quality: job performance as a mediator

The mediation analysis provided additional insight into how teachers' job satisfaction relates to students' perceptions of relationship quality. Job satisfaction was not associated with students' perceptions of relationship quality (contrary to H1); instead, its relevance emerged through teachers' affective and stress-related functioning, in relation to students' interpretations of commitment (H2) but not closeness or complementarity (contrary to H2) in the teacher-student relationship. This indirect-only pattern is consistent with Social Exchange Theory (Blau, 1964; Thibaut & Kelley, 1959), insofar as teachers' professional functioning provides the basis upon which students interpret relational investment, loyalty, and commitment. In this sense, it is not job satisfaction itself that students notice but rather the emotional and behavioural cues, that are outwardly visible and meaningful to students, that job satisfaction helps generate. This highlights the central role of teachers' job performance as pathways linking their job satisfaction to students' interpretations of commitment in the teacher-student relationship.

Teachers' job satisfaction may translate indirectly into students' meta-commitment because it reflects teachers' broader motivational and psychological context within which the teaching relationship unfolds. From a Social Exchange Theory perspective (Blau, 1964; Thibaut & Kelley, 1959), when teachers evaluate their work environment positively, they perceive their role as rewarding and are, therefore, more inclined to reciprocate ("give back") through persistence, dedication, and sustained relational investment. At the same time, positive emotions associated with job satisfaction may further reinforce this process through a Broaden-and-Build Theory mechanism (Fredrickson, 1998, 2001), whereby positive affect broadens teachers' thought-action repertoires and builds enduring psychological and social resources that support sustained relational engagement with their students. This supports previous empirical research linking teachers' job satisfaction and higher levels of professional commitment (Fresko et al., 1997; Zhang, 2022).

In contrast, closeness and complementarity may primarily operate at the interpersonal and interactional level (nodding while listening, sustained eye contact, a warm tone, a brief smile, adjusting explanations in response to visible confusion, and working together to solve a task). Teachers are more likely to develop closeness with their students through emotional bonding and shared experiences, and complementarity through coordination of behaviours within one-to-one interactions. Thus, it is plausible that teachers' job satisfaction functions as a broadening antecedent that contributes to the building of their motivation and capacity to invest in relationships that students readily sense. Whereas closeness and complementarity represent interactional mechanisms that emerge through the dynamics of interpersonal exchanges.

In summary, the findings of this study provide insight into how students interpret teachers' emotional exchanges and offer a window into the effectiveness of such exchanges from the teacher's position. The result that both teachers' excitement, pride, and happiness (positive affect) and teachers' workload stress (a negatively felt state) positively contributed to students' perceptions of relationship quality supports the importance of teachers' emotions for the development and maintenance of quality teacher-student relationships (Frenzel et al., 2021). When students feel they have established a good quality relationship with a teacher, they are more likely to "return" the benefits they perceive they have received (e.g., energy, enthusiasm, investment), a dynamic consistent with social exchange perspectives (Cropanzano & Mitchell, 2005). These emotional signals were especially consequential for students' meta-perspectives of commitment (loyalty, investment, optimism about progress), with positive affect and workload stress providing the most salient cues that students appear to "read" in everyday classroom interactions. Across international education systems, facing comparable

workforce and well-being challenges (OECD, 2024; UNESCO, 2024), teachers are experiencing increasing pressures related to workload and the emotional demands of teaching and supporting students, underscoring the importance of understanding how these conditions are reflected in and interpreted within classroom relationships.

4.4. Implications for theory, practice, and policy

From a theoretical and methodological point of view, this study illustrates the conceptual value of using meta-perspectives in teacher-student relationship research; expanding the work of Jowett et al. (2023). The direct and meta-perspectives of relationship quality provide alternative and corresponding measures, both of which have the capacity to shape students' perspectives of teacher-student relationship quality. In sport, when the direct and meta-perspectives are combined, they yield yet another measure of relationship quality, known as assumed similarity (the degree to which the student and teacher believe they are alike in their perceptions). For example, in this scenario the direct perspective is 'I trust my teacher' and the meta-perspective is 'My teacher trusts me' (Jowett & Clark-Carter, 2006; Jowett & Nezelek, 2012). When examined in other contexts, such as sport, coaches and athletes' direct and meta-perspective are usually strongly correlated, yet they differentially predict performance- and well-being-related outcomes (Jowett, 2008, 2009). Extending such multi-perspective logic to education, our findings suggest that students' interpretations of teachers' affective signals may be more proximally relevant to perceived relationship quality than teachers' belief-based self-evaluations (e.g., efficacy), reinforcing the importance of what students can observe (positive affect, visible strain managed well) over what they cannot (internal beliefs). Theoretically, the findings refine models of relationship quality by clarifying how relational meanings are constructed through students' interpretations of enacted teacher behaviour, with Broaden-and-Build Theory and Social Exchange Theory elucidating the affective and interpretive mechanisms. Methodologically, it opens avenues for the multi-perspective assessment of modelling classroom relationships and motivates future work that examines assumed similarity (the alignment of teacher and student views) and its unique predictive utility in educational contexts. In addition, developing a rigorous measure of the meta-perspective of the TSRQ-Q represented an important step in consolidating the conceptual and theoretical development of teacher-student relationship quality research.

From a practical viewpoint, teacher-student relationship quality is pivotal for attainment and satisfaction (Cui, 2022; Roorda et al., 2011). Thus, teachers should ensure that they are both competent and happy to fulfil their role as a teacher because their students can infer from these exchanges whether they are connected to them. These connections can be transformative for each student in the class as they can transcend beyond the classroom (Kim, 2021; Pianta, 1999). However, it is as important to note that strong, sound, healthy, high-quality teacher-student relationships affect teachers' emotions, feelings and attitudes (Spilt et al., 2011). Good relationships can be a source of joy and pleasure for teachers, adding to their job satisfaction. In contrast, bad relationships can be a source of anxiety and stress, adding to burnout and disengagement. For that reason, it is imperative that teachers' professional development focusses on exploring the topic of the teacher-student relationship and raising awareness about the role and significance of this unique relationship in the context of teaching and learning. Such work should also provide development opportunities related to supporting teachers' well-being that help teachers sustain positive affect and manage workload stress in ways that students interpret as commitment.

At a policy level, the implications of our findings are intended to complement existing workforce and professional development initiatives and are framed at a level appropriate for schools operating within the shared national policy landscape. The emotional and relational dimensions of teaching should be recognised as integral to professional

practice rather than peripheral activities. Accordingly, policy systems and strategies should aim to sustain teachers' positive emotional resources, reduce unproductive strain, and strengthen the emotional cues students use to interpret teacher investment. This requires attention to both structural working conditions and professional learning. In practice, schools can support teachers' emotional resources by reducing avoidable workload through streamlined administrative processes, protected planning time, and clear expectations regarding out-of-hours communication, while strengthening collegial trust through collaborative planning, peer mentoring, and psychologically safe staff cultures (Han et al., 2020; Toropova et al., 2020). Providing opportunities for emotional restoration, such as calm staff areas, and protected break times during the school day, may further help teachers maintain the positive affective presence that benefits both themselves and their students. Similarly, evidence-informed well-being support structures, including mindfulness-based or emotion-regulation programmes that have been shown to increase positive affect, resilience, and job satisfaction (Carroll et al., 2022; Xu et al., 2026), may help teachers sustain the emotional tone that students interpret as commitment. Collectively, these approaches emphasise that teacher well-being should be treated as an organisational priority rather than an individual responsibility.

Beyond well-being supports, teachers' job satisfaction can also be enhanced through organisational practices that support professional autonomy, competence, and relatedness (Ryan & Deci, 2017). In practice, this includes facilitating professional discretion and pedagogical creativity, providing opportunities for teachers to build and use their expertise, and fostering meaningful relationships. Moreover, continuing professional development (CPD) that emphasises relational and interpersonal skills, (e.g., warm instructional tone, explicit acknowledgement of effort, follow-up questioning, tailored feedback, and attuned non-verbal communication) may further strengthen teacher-student relationship quality, particularly when such elements are embedded within existing CPD provision. Effective CPD can raise awareness of what characterises high-quality teacher-student relationships, their significance to individual and collective outcomes, and practical ways of developing and sustaining relationships that help both teachers and students to flourish. Recognising and supporting these psychological resources is central to developing and retaining a resilient teaching workforce, with the potential to reduce vulnerability to burnout, attrition, stress, and anxiety (Abós et al., 2019; Education Support, 2025; Skaalvik & Skaalvik, 2011).

4.5. Limitations and future research directions

The findings integrate insights from the organisational and social psychology literatures to highlight important performance-related processes through which teachers' perceptions of job satisfaction may influence students' perceptions of relationship quality. At the same time, alternative or reciprocal pathways remain plausible (Bandura, 1986), including configurations in which job performance influences job satisfaction (Judge et al., 2001). Future longitudinal or experimental research would be well placed to examine these directional dynamics more explicitly. We acknowledge several limitations of the study, including its cross-sectional design, focus on one subject area, and modest teacher sample size which constrain causal inference and statistical power. While the sample size may limit precision and stability of estimates, the use of bias-corrected bootstrapping provides a robust approach for estimating indirect effects under small-sample conditions (MacKinnon et al., 2004; Preacher & Hayes, 2008). Nevertheless, larger and more diverse samples would strengthen confidence in the generalisability and robustness of associations between teachers' job satisfaction, job performance, and relationship quality.

Future work would benefit from longitudinal and experimental designs to explore the reciprocal relationship between job satisfaction and job performance, as well as their subsequent relational effects. Given the associations between teachers' emotions and students' perspectives of

relationship quality, future work may wish to examine how teacher and student perspectives (direct and meta) interact across time and contexts. Developing reliable measures of teacher perceptions of relationship quality would facilitate dyadic and multilevel designs capable of capturing alignment, divergence, and change within teacher-student relationships. Finally, moderation analyses and moderated-mediation models may help identify conditions under which the indirect pathways observed in this study are strengthened or attenuated, offering both theoretical and practical insight.

4.6. Conclusion

In summary, we offer a novel perspective on the relational dynamics between teachers and students by highlighting how students interpret aspects of teachers' job performance (teacher efficacy, workload stress, and positive affect). Drawing on Broaden-and-Build Theory (Fredrickson, 1998, 2001), teachers' job satisfaction is conceptualised as an important foundation for these performance experiences; broadening teachers' resources in ways that support classroom functioning and relationship building. Our findings suggest that job performance functions as an enacted set of cues that students interpret within ongoing social exchange processes, with implications for how they view teacher-student relationship quality. Notably, students perceived both stress and positive affect as meaningful cues of relationship quality, emphasising the importance of students' interpretive frameworks in perceptions of relationship quality. In highlighting these processes, the findings draw attention to the conditions that enable teachers to engage in forms of job performance to which students respond. Alongside perspectives of job satisfaction as an outcome of job performance, these findings underscore the value of resource-based conceptualisations of job satisfaction for extending relationship quality models and understanding how psychological and social resources are built in the workplace.

Informed consent

Informed consent was obtained from all participants included in the research. In addition, parental consent was sought for those aged under 16 in accordance with the guidance of the British Psychological Society and British Educational Research Association.

Ethical approval

All procedures performed in this study involving human participants were conducted in accordance with the ethical standards of the institutional research committee of the lead author and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

CRediT authorship contribution statement

Victoria E. Warburton: Conceptualization, Formal analysis, Methodology, Project administration, Writing – original draft, Writing – review & editing. **Sophia Jowett:** Conceptualization, Methodology, Writing – original draft, Writing – review & editing. **Lee C. Beaumont:** Conceptualization, Methodology, Project administration, Writing – original draft, Writing – review & editing. **Luke Felton:** Writing – original draft, Writing – review & editing. **Krystal C.M. Bishop:** Formal analysis, Writing – original draft.

Declaration of competing interest

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.tate.2026.105744>.

Data availability

Ethical permission for the data collection did not include participants agreeing for sharing of data beyond use for this study.

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