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Misaligned Educational Expectations and Adolescent Well-Being in China

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Research Article

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Abstract

Parental educational expectations are often treated as family resources, but their developmental meaning may depend on whether adolescents share and psychologically sustain those expectations. Using linked student-parent data from the China Education Panel Survey, this study examines whether parent-child educational expectation mismatch is associated with expectation-induced academic pressure, psychological distress, and school belonging among Chinese adolescents. The analysis distinguishes actual mismatch based on parent and adolescent reports from perceived mismatch based on adolescents' perceptions of parental expectations. Wave 2 mechanism models, response surface analysis, moderation models, multiple-imputation checks, attrition-weighted longitudinal checks, and heterogeneity tests are used to assess the robustness and limits of the evidence. Parent-higher mismatch is associated with higher expectation-induced pressure, greater psychological distress, and lower school belonging in Wave 2 models. Pressure-pathway models indicate a modest indirect association between parent-higher mismatch and distress. Response surface models show that mismatch is not reducible to a simple difference score, especially for school belonging. Additional checks indicate that perceived mismatch is more consistently linked to distress than parent-reported mismatch, while longitudinal associations are weak after baseline adjustment. The findings identify a relational-pressure pattern rather than a confirmed causal pathway. Practical implications focus on expectation calibration in families, school-based screening for pressure-related distress, and structured home-school communication.

Keywords: educational expectations, parent-child mismatch, academic pressure, adolescent well-being, China Education Panel Survey

Highlights

• Actual and perceived mismatch are separated as distinct family-process measures.

• Parent-higher mismatch is linked to pressure, distress, and lower belonging.

• Pressure-pathway evidence is interpreted as associational, not causal.

• Response surface analysis shows nonlinear alignment patterns for belonging.

• Longitudinal checks qualify causal interpretation.

Introduction

Educational expectations occupy a central place in family life. Parents who expect their children to attain higher levels of schooling may communicate the value of education, mobilize academic resources, and reinforce adolescents' future orientation. Meta-analytic work has consistently linked parental expectations and involvement to educational outcomes (Barger et al., 2019; Castro et al., 2015; Pinquart & Ebeling, 2020). Yet expectations are not simply individual attitudes that travel from parent to child. They are embedded in family relationships, cultural scripts of mobility, school competition, and adolescents' own perceptions of what is possible and desirable.

This relational dimension matters because the same parental expectation can have different developmental meanings depending on whether the adolescent accepts, rejects, or feels unable to meet it. A high expectation shared by parent and child may provide direction and encouragement. A high expectation not shared by the child may be experienced as external pressure. Conversely, when adolescents expect more education than parents do, the issue may not be excessive pressure but a perceived lack of recognition, resources, or confidence from the family. Existing CEPS-based studies have shown that parent-child expectation discrepancy is associated with adolescent mental health (Zhang, 2024) and that parental expectations may intersect with academic pressure (Xu et al., 2024). However, two issues remain underdeveloped. First, much research relies on level or difference-score models, which can obscure asymmetric and nonlinear patterns. Second, studies often give limited attention to the gap between parent-reported expectations and adolescents' perceptions of parental expectations.

The present study reframes educational expectation mismatch as a relational-pressure process. The question is not whether parents should hold higher or lower expectations. The more precise question is when expectations become psychologically sustainable for adolescents. In China's competitive educational context, examination performance, school progression, and family mobility are tightly connected. Educational expectations therefore carry not only cognitive information about future schooling but also emotional signals about family hope, fear of downward mobility, and acceptable life trajectories. This setting makes China an important case for examining whether mismatch is linked to pressure and adolescent well-being.

Existing studies have established that parent-child expectation discrepancy is associated with adolescent adjustment. This study advances the literature by showing that the developmental meaning of mismatch depends on whether expectations are reported by parents or perceived by adolescents, and by demonstrating that alignment patterns cannot be fully captured by conventional difference-score models. This distinction changes the theoretical

interpretation of educational expectations: mismatch is not only a quantitative distance between two aspiration levels but also a family-process signal that may be experienced differently depending on whose report is used and whether the adolescent interprets parental expectations as shared, realistic, and supported.

Using CEPS data, this study examines three questions. First, is parent-child educational expectation mismatch associated with expectation-induced academic pressure, psychological distress, and school belonging? Second, do actual mismatch and perceived mismatch show different associations with adolescent well-being? Third, do supportive contexts such as parent-child communication and school support reduce or buffer these associations? The study contributes by distinguishing actual and perceived expectation structures, by using response surface analysis to avoid overreliance on difference scores, and by presenting longitudinal and supplementary sensitivity checks that keep causal interpretation cautious.

Literature Review and Theoretical Framework

Parental Expectations, Family Process, and Adolescent Development

Parental educational expectations are commonly interpreted as a form of family social capital. They can signal the importance of schooling, organize family investment, and encourage persistence. However, family-process perspectives suggest that expectations are useful not simply because they are high but because they are communicated, interpreted, and supported in everyday interaction. The family stress model also warns that family aspirations operate within resource constraints and emotional climates (Conger et al., 2010). When expectations exceed adolescents' perceived ability, autonomy, or available support, they may become stressors rather than resources.

Research on parent-child discrepancies reinforces this point. Studies of educational aspiration mismatch show that discrepancies may relate to academic engagement, self-efficacy, and emotional well-being (Lv et al., 2018; Rutherford, 2015; Song et al., 2024; Zhang, 2024). These studies move the literature beyond the assumption that parental expectations work in a uniformly positive direction. They also suggest that direction matters: parent-higher mismatch and child-higher mismatch may represent different family processes. Parent-higher mismatch may be linked to performance pressure, whereas child-higher mismatch may indicate insufficient family recognition or limited family capacity to support adolescents' aspirations.

Academic Pressure and Psychological Well-Being

Academic pressure is a central pathway through which expectation mismatch may be linked to adolescents' psychological adjustment. Stress and appraisal theory emphasizes that demands become harmful when they exceed perceived coping resources (Lazarus & Folkman, 1984). In school contexts, academic pressure has been linked to depressive and anxiety symptoms, and a recent systematic review identifies academic pressure as a potentially important contributor to adolescent mental health problems (Steare et al., 2023). In China, where school transitions and examinations are highly consequential, parental expectations may intensify pressure by making school performance a family-level project rather than a private student task.

This study therefore treats expectation-induced pressure as more than a generic school-stress item. It is a proximal appraisal of how adolescents experience parental expectations. If parent-higher mismatch is linked to distress, a key question is whether adolescents report feeling pressured by these expectations. At the same time, pressure cannot fully exhaust the meaning of mismatch. Child-higher mismatch may not increase pressure, but it may still correspond to distress or lower school belonging if adolescents perceive that their aspirations are unsupported.

School Belonging and Protective Contexts

School belonging is a second dimension of well-being because adolescents spend much of their daily life in school and interpret family expectations through school performance. Goodenow's (1993) work on psychological sense of school membership emphasizes perceived acceptance, inclusion, and membership in the school community. Meta-analytic evidence shows that school belonging is associated with supportive teacher-student and peer relationships, motivation, and well-being (Allen et al., 2018). For adolescents facing family expectation mismatch, school belonging may buffer distress by providing alternative sources of recognition. However, whether it actually moderates mismatch associations is an empirical question.

Parent-child communication, teacher support, and school support are theoretically important because they can translate expectations into realistic and emotionally manageable goals. Communication may help parents and adolescents negotiate educational aims. Teacher support may reduce pressure by offering academic guidance and emotional reassurance. School support may provide a broader climate of belonging. Still, supportive contexts may show direct protective associations without necessarily changing the mismatch-distress association. The analyses below therefore treat moderation as an empirical test rather than an assumed result.

Hypotheses

H1: Parent-higher educational expectation mismatch is associated with higher expectation-induced academic pressure.

H2: Parent-higher educational expectation mismatch is associated with greater psychological distress and lower school belonging.

H3: Expectation-induced pressure forms a modest pressure-pathway association linking parent-higher mismatch with psychological distress. This hypothesis is tested as an indirect association, not as causal mediation.

H4: Perceived expectation mismatch is more strongly associated with adolescent well-being than parent-reported actual mismatch.

H5: Parent-child communication, teacher support, and school support are associated with better adolescent well-being and may moderate the association between mismatch and well-being.

Method

Data and Sample

The study uses the China Education Panel Survey (CEPS), a nationally representative longitudinal survey linking students to family, class, school, and community contexts. The main analyses use Wave 2 linked student-parent data because Wave 2 contains the most complete set of expectation, pressure, psychological distress, and school belonging measures. Longitudinal sensitivity checks use Wave 1 mismatch to predict Wave 2 outcomes while controlling baseline outcomes. The analytic sample varies across models because of item nonresponse and the exclusion of the non-ordinal expectation response 'does not matter.' The main Wave 2 models include approximately 8,200 valid observations across 112 schools.

Analyses use student weights where indicated and school-clustered standard errors. Supplementary checks include unweighted models, class-clustered standard errors, county fixed effects, multiple imputation for missing covariates, attrition-weighted longitudinal models, and subgroup interaction tests. These analyses are reported to evaluate robustness rather than to claim causal identification.

Measures

Educational expectations. Adolescents reported how far they expected to go in school, and parents reported how far they expected the child to go in school. Ordinal categories ranged from early school leaving or no further schooling to doctoral study. Higher values indicate higher expected educational attainment. The non-ordinal

response 'does not matter' was excluded from mismatch construction and examined in sensitivity checks. Actual mismatch was calculated using parent-reported expectation and adolescent self-expectation. Perceived mismatch used the adolescent's perception of parental expectation and adolescent self-expectation. Categorical indicators distinguished expectation consistency, parent-higher mismatch, and child-higher mismatch. Parent and adolescent expectation scores were centered before response surface models were estimated.

Expectation-induced academic pressure. Students reported how much pressure they felt from parental expectations. Higher values indicate greater expectation-induced pressure. Because the item directly refers to parental expectations, it is interpreted as a proximal appraisal of pressure from family expectations rather than as a general school-stress scale. The measure is single-item, so internal consistency reliability is not applicable; this limitation is addressed explicitly in the interpretation of the pressure pathway.

Adolescent well-being. Psychological distress was measured using comparable items on recent depressed and unhappy feelings, with higher scores indicating greater distress. A three-item version including nervousness was used in sensitivity checks. School belonging was measured using items tapping closeness to people at school, boredom at school, and desire to transfer; negative items were reverse-coded so that higher scores indicate stronger belonging. These measures are used as survey-based proxies for distress and school belonging rather than as clinical diagnostic scales.

Protective contexts. Parent-child communication was measured using students' reports of how often parents discussed school experiences and personal worries with them. Teacher support and school support were measured using students' reports of teacher praise or criticism, peer friendliness, and class climate, with items coded so that higher scores indicate more supportive contexts. Control variables included gender, only-child status, family economic condition, parental education, relative income, cognitive score, achievement score, hukou type, boarding status where available, and school or cluster identifiers.

Measurement transparency. For multi-item measures, item direction was harmonized before composite scores were constructed. Descriptive statistics, missingness, reliability coefficients, and standardization decisions are reported in the supplementary material where available. Single-item and ordinal indicators are identified explicitly to avoid overstating measurement precision.

Analytic Strategy

The analysis proceeded in five steps. First, categorical mismatch models compared parent-higher and child-higher mismatch with expectation consistency. Second, expectation-induced pressure was added to assess the pressure pathway. Third, response surface analysis estimated polynomial models using parent and child expectations and their squared and interaction terms. This approach avoids the loss of information involved in difference scores and allows testing patterns along the line of congruence and the line of incongruence (Edwards, 1994; Shanock et al., 2010). Fourth, moderation models tested parent-child communication, teacher support, and school support. Fifth, robustness checks examined multiple imputation, attrition-weighted longitudinal models, heterogeneity by gender, socioeconomic status, hukou, and boarding status, and the gap between parent-reported expectations and adolescents' perceived parental expectations.

The design is observational, and the main mechanism and moderation models are contemporaneous Wave 2 models. Accordingly, the manuscript interprets coefficients as associations. The pressure pathway is reported as evidence of an indirect association rather than as causal mediation. Longitudinal and attrition-weighted checks are used to assess whether the relational-pressure pattern persists after baseline adjustment, but they are not presented as a definitive causal identification strategy.

Results

Mismatch Distribution

Table 1 reports the analytic distribution of expectation mismatch. In Wave 2 actual mismatch, 4,469 adolescents had expectations consistent with their parents, 2,700 reported lower expectations than their parents, and 1,996 reported higher expectations than their parents. Perceived mismatch was more often aligned: 6,152 adolescents perceived parental expectations as consistent with their own, while 1,256 perceived parents as expecting more and 1,664 perceived parents as expecting less. This descriptive contrast indicates that parent-reported expectations and adolescent-perceived parental expectations are related but not interchangeable.

Mechanism Models

Table 2 reports the main Wave 2 mechanism models. Parent-higher mismatch was associated with higher expectation-induced pressure, supporting H1. It was also associated with greater psychological distress and lower school belonging, supporting H2 in the contemporaneous model. After pressure was added to the distress model, expectation-induced pressure was strongly associated with distress. The product-of-coefficients estimate suggests a

modest indirect association between parent-higher mismatch and distress through pressure. Child-higher mismatch was not consistently associated with pressure or distress in the actual-mismatch model.

Protective Contexts and Moderation

The moderation analyses are reported in Supplementary Table S2 to keep the main text concise. Parent-child communication, teacher support, and school support generally showed direct protective associations with lower distress or stronger school belonging. Parent-child communication was also linked to a weaker parent-higher mismatch-pressure association. However, teacher support and broader school support did not consistently moderate the mismatch-distress association. These findings support a cautious interpretation: supportive contexts matter for adolescent well-being, but they do not uniformly buffer expectation mismatch.

Response Surface Analysis and Robustness

Table 3 summarizes the response surface and sensitivity checks. For expectation-induced pressure, the line-of-congruence slope was positive, indicating that pressure tended to be higher when both parent and child expectations were higher. For school belonging, the line-of-incongruence curvature was negative and statistically significant, suggesting that sharper divergence between parent and child expectations corresponded to lower belonging. The distress surface was weaker, indicating that categorical and pressure-pathway models provide clearer evidence for psychological distress than the continuous RSA terms do.

Additional robustness checks refine the interpretation. Multiple-imputation sensitivity checks continued to show that parent-higher mismatch and expectation-induced pressure were associated with distress. Attrition-weighted longitudinal models did not show that Wave 1 mismatch robustly predicted Wave 2 distress, school belonging, or pressure after baseline adjustment. Heterogeneity models offered little evidence that associations differed consistently by gender, hukou, socioeconomic status, or boarding status. A separate actual-perceived gap model showed that perceiving parental expectations as higher than parents themselves reported was associated with greater expectation-induced pressure but not with distress once controls were included. These results support the article's central caution: the strongest evidence is contemporaneous and relational, not causal.

Discussion

This study advances a relational account of educational expectations. Parental expectations are not automatically developmental resources simply because they are high. Expectations appear more beneficial when they are coordinated with adolescents' own aspirations and embedded in supportive family processes. When parents

expect more schooling than adolescents expect for themselves, adolescents report higher expectation-induced pressure, and this pressure is associated with greater psychological distress. The finding does not mean that parents should lower their expectations. It means that expectations need to be calibrated, explained, and made psychologically sustainable.

The Chinese educational context helps explain why mismatch matters. Schooling is deeply tied to family mobility strategies, and educational success is often treated as a collective family project. For many families, expectations are shaped by fear of downward mobility, uncertainty about labor-market returns, and intense competition around school transitions. Under these conditions, parental hope can become emotionally loaded: it may communicate confidence and investment, but it may also communicate risk, obligation, and fear of failure. This is why the same high expectation can be experienced as encouragement in one family and pressure in another. The key distinction is not expectation level alone but whether the expectation is recognized by the adolescent as shared, realistic, and supported.

A second contribution is the distinction between actual and perceived mismatch. Parent-reported expectations are important, but adolescents' perceptions of parental expectations may be closer to the pressure they experience. This point is central for practice. Practitioners cannot infer adolescents' stress simply from what parents report. They need to ask how adolescents interpret parental expectations, whether they perceive those expectations as support or surveillance, and whether they believe their own aspirations are understood. In this sense, expectation mismatch is not merely a measurement problem but a family communication problem.

The findings also clarify the role of school belonging. Response surface results show that divergence between parent and child expectations is most visible for school belonging. This suggests that mismatch may be associated not only with internal emotional states but also with adolescents' sense of fit within the school environment. When family expectations and self-expectations diverge, school may become a site where adolescents experience the contradiction between external demands and internal goals. Strengthening school belonging therefore remains important even when it does not statistically moderate every mismatch association.

The longitudinal results are the principal methodological caution. Wave 1 mismatch did not robustly predict Wave 2 outcomes after baseline adjustment and attrition weighting. This does not invalidate the cross-sectional findings, but it limits causal claims. The evidence is best read as identifying a relational-pressure pattern: expectation mismatch, pressure, distress, and belonging co-occur in theoretically meaningful ways, but the available

data do not confirm that mismatch causes later distress. Future research should use designs that track changes in parental expectations, adolescent aspirations, pressure, and well-being across shorter intervals or around school-transition events.

Practice Implications for Families, Schools, and Home-School Communication

First, family education counseling should shift from advising parents to simply 'raise expectations' toward expectation calibration. Counselors and family practitioners can help parents distinguish educational encouragement from pressure by asking three questions: What specific educational goal is being communicated? Does the adolescent share or understand the goal? What resources and emotional support accompany the goal? A useful intervention would ask parents and adolescents to write down their expected educational trajectory separately, compare similarities and differences, and then negotiate a realistic support plan rather than treating disagreement as defiance.

Second, school mental-health services should treat expectation-induced pressure as a screening issue. Students who report that parental expectations create substantial pressure should not only be offered individual stress-management advice. Schools should assess whether the pressure reflects a mismatch between parental expectations and adolescent self-understanding. For high-pressure students, school counselors can provide brief assessment, academic planning, referral to psychological support when needed, and parent meetings that focus on realistic goals, coping resources, and communication tone.

Third, home-school communication should become more structured. Teachers often communicate results and problems to parents, but less often facilitate expectation alignment. Schools could implement parent-teacher-student conferences in which adolescents are present and invited to state their own goals, perceived difficulties, and needed support. Such conferences should avoid a one-way message from school to parent or parent to child. The aim is triadic calibration: parents clarify hopes, adolescents clarify self-perceived capacity and motivation, and teachers translate both into concrete learning support.

Fourth, school belonging should be treated as a protective outcome in its own right. Teacher praise, fair feedback, peer friendliness, and a non-humiliating class climate are not merely background conditions. They can provide adolescents with a sense of recognition when family expectations feel difficult to meet. Schools should therefore combine academic advising with belonging-oriented practices, including teacher check-ins, peer mentoring, and early identification of students who express boredom, alienation, or a desire to transfer.

Limitations

Several limitations remain. First, the main mechanism and moderation models are cross-sectional. Distress may shape how adolescents perceive parental expectations and pressure, so causal mediation cannot be claimed. Second, expectation-induced pressure is measured with a direct item rather than a multi-item scale. Third, some support measures are brief and may not fully capture the quality of teacher or school support. Fourth, the exclusion of non-ordinal expectation responses may affect generalizability, although sensitivity checks address this issue. Fifth, heterogeneity analyses are exploratory and do not provide strong evidence of subgroup-specific mechanisms. Finally, the study focuses on educational expectations and does not observe all forms of family negotiation, tutoring investment, or psychological support that may shape the meaning of expectations.

Conclusion

Educational expectations are relational. In CEPS Wave 2 data, parent-higher expectation mismatch is associated with higher expectation-induced pressure, greater psychological distress, and lower school belonging. However, longitudinal and attrition-weighted checks do not support strong causal claims. The central contribution is therefore not that mismatch causes adolescent distress, but that mismatch marks a relational-pressure pattern in which family aspirations, adolescent self-understanding, and school belonging intersect. For families and schools, the implication is clear: the goal is not to maximize expectations, but to make expectations shared, realistic, emotionally sustainable, and supported by concrete communication and school-based resources.

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Tables

Table 1

Distribution of Educational Expectation Mismatch

Mismatch category	Actual mismatch, n (%)	Perceived mismatch, n (%)
Consistent	4,469 (48.8%)	6,152 (67.8%)
Parent higher than child	2,700 (29.5%)	1,256 (13.8%)
Child higher than parent	1,996 (21.8%)	1,664 (18.3%)
Valid total	9,165	9,072

Note. Percentages are based on valid ordinal expectation responses. The non-ordinal response 'does not matter' was excluded from valid mismatch categories.

Table 2

Main Wave 2 Mechanism Models

Predictor / model information	**Pressure**	**Distress**	**Distress with pressure**	**Belonging**
Parent higher	0.098** (0.033)	0.079** (0.027)	0.069** (0.026)	-0.052* (0.024)
Child higher	-0.014 (0.045)	0.030 (0.037)	0.032 (0.036)	-0.021 (0.023)
Expectation-induced pressure			0.099*** (0.016)	-0.016+ (0.009)
Controls included	Yes	Yes	Yes	Yes
Student weights	Yes	Yes	Yes	Yes
Clustered standard errors	School	School	School	School
N	8,222	8,222	8,222	8,213

Note. Entries are coefficients with school-clustered standard errors in parentheses. Models use student weights and include the covariates described in the Method section. Consistent expectations are the reference group. Full covariate-adjusted models should be reported in Supplementary Table S2. + p < .10, * p < .05, ** p < .01, *** p < .001.

Table 3

Response Surface and Sensitivity Summary

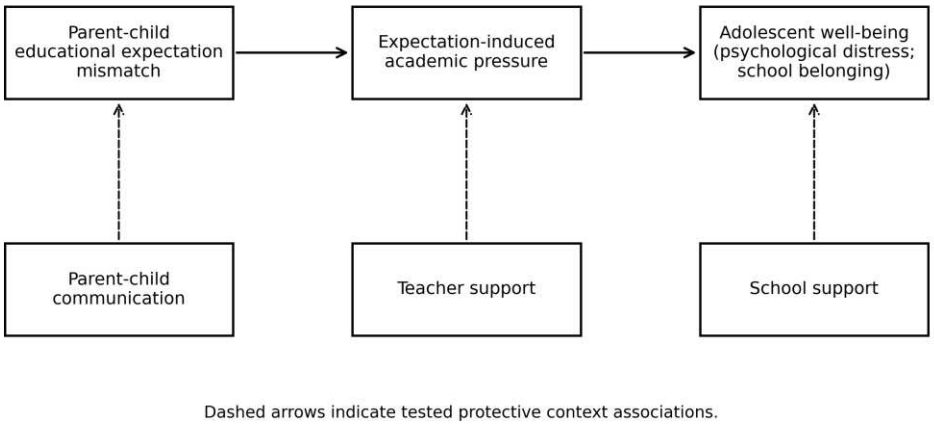
Outcome	Parameter	Estimate
Pressure	RSA LOC slope	0.074*** (0.017)
Pressure	RSA LOC curvature	-0.014* (0.006)
Pressure	RSA LOIC slope	0.078* (0.033)
Pressure	RSA LOIC curvature	-0.008 (0.019)
Distress	RSA LOC slope	-0.019 (0.013)
Distress	RSA LOC curvature	-0.006 (0.004)
Distress	RSA LOIC slope	0.026 (0.023)
Distress	RSA LOIC curvature	0.008 (0.012)
Belonging	RSA LOC slope	0.014 (0.010)
Belonging	RSA LOC curvature	0.000 (0.003)
Belonging	RSA LOIC slope	-0.017 (0.018)
Belonging	RSA LOIC curvature	-0.032*** (0.008)
Distress	Multiple imputation: parent higher	0.060* (0.027)
Distress	Multiple imputation: pressure	0.123*** (0.015)
Distress	Attrition-weighted W1 parent higher	0.008 (0.031)
Pressure	Perceived higher than parent report	0.083* (0.040)

Note. LOC = line of congruence; LOIC = line of incongruence. RSA entries are Wave 2 surface parameters. Sensitivity rows summarize selected supplementary analyses. Full models should be reported in the supplementary material.

Figures

Figure 1

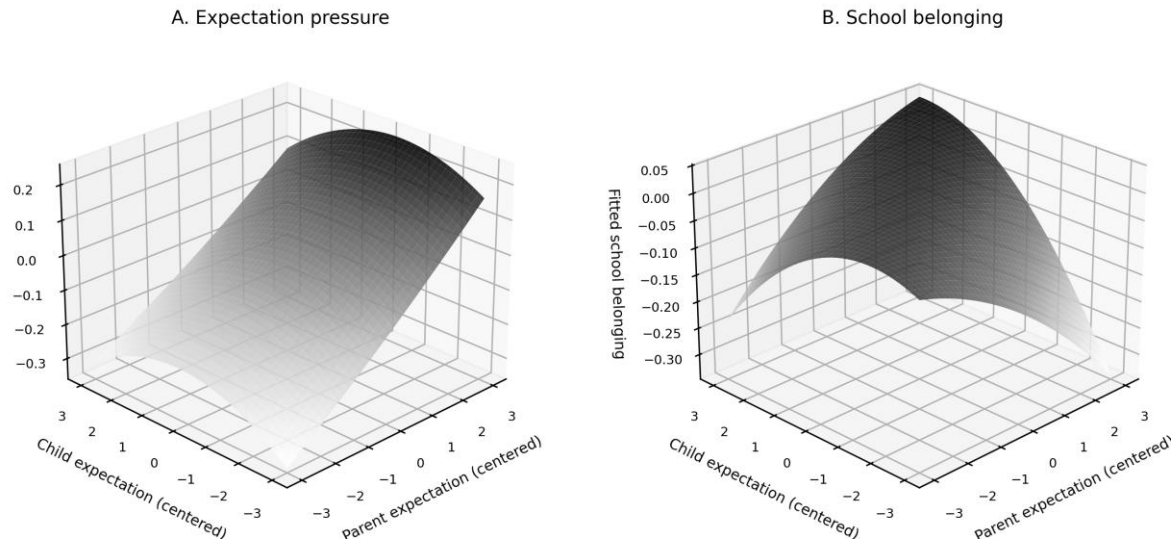
Conceptual Model



Note. Solid arrows indicate the main pressure pathway. Dashed arrows indicate tested protective context associations.

Figure 2

Response Surface Plots for Expectation Pressure and School Belonging



Note. Response surfaces are based on centered parent and adolescent educational expectations. The figure is descriptive of fitted model surfaces and should be interpreted with the coefficient table.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- JCFSSupplementaryMaterial.docx