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Research on the Differences in Family Cultivation Strategies of 15-year-old Students' Social and Emotional Skills

Shuchang Qian[1], Shimei Pan[1,*]

[1]College of Education, Zhejiang Normal University, Jinhua, China
**Corresponding author*

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Abstract: Family is a key context shaping adolescents' social and emotional competencies, yet class-based differences in cultivation strategies remain underexplored. Using OECD-SSES data from China and a reproduction perspective, this study employs a three-level hierarchical linear model to examine stratified family strategies and their effects. Results show a clear positive association between family socioeconomic status and students' social-emotional competencies. These competencies are reproduced through interpersonal relationships, activity participation, and psychological support, with significant class variation. Middle and lower classes students are more sensitive to close relationships, particularly parent–child interactions. Although advantaged families provide more extracurricular opportunities, middle-status students benefit more from group-based activities. Parental psychological support is especially important for middle and lower classes students, while teacher support shows no consistent effects. Peer support is more beneficial for advantaged students but has limited impact on others. Overall, the findings call for more targeted and complementary family strategies to support adolescents' development.

1. Introduction

The Organisation for Economic Co-operation and Development (OECD) has long exerted substantial influence through its Programme for International Student Assessment (PISA), which focuses on academic outcomes. However, this emphasis has increasingly been questioned, as academic achievement represents only one dimension of success and does not necessarily translate into career attainment or life satisfaction. Accumulating evidence suggests that social and emotional skills play a more decisive role in shaping individuals' long-term success and well-being[1]. Yet, until recently, there has been a lack of large-scale international frameworks, indicators, and data for assessing these competencies. To address this gap, the OECD launched the first round of the Study on Social and Emotional Skills (SSES) in 2019, covering ten cities across nine countries. The results were published in 2021 in the report *Beyond Academic Learning: First Results from the Survey of Social and Emotional Skills.*

In contrast to traditional assessments centered on cognitive abilities, SSES focuses on non-cognitive competencies and addresses the fundamental question of what kinds of individuals education systems should cultivate in an uncertain future. The OECD conceptualizes social and emotional skills as consistent patterns of thought, emotion, and behavior, and constructs its framework based on the "context – skills – outcomes" model, drawing on the Big Five Theory. Five core dimensions are identified: conscientiousness, neuroticism, agreeableness, openness, and extraversion[2]. Existing findings highlight the close relationship between family background and the development of social and emotional skills, emphasizing the family as a key context that provides resources and opportunities[3]. However, limited attention has been paid to how cultivation strategies vary across social strata and how these differences shape processes of family-based reproduction. This lack of clarity constrains the development of targeted family education practices. Grounded in reproduction theory and drawing on OECD data, this study examines class-based differences in the mechanisms through which families reproduce social and emotional skills, with the aim of informing more effective and differentiated developmental strategies.

2. Literature Review and Research Hypotheses

2.1. Family Background and the Development of Social and Emotional Skills

Pierre Bourdieu's theory of cultural capital reveals the critical role of families in social reproduction. Through the intergenerational transmission of habitus and various forms of capital, individuals reproduce their original social positions within the educational system. Within this framework, the habitus developed by students in the family context not only influences their comprehension and mastery of school knowledge but also shapes their capacity to engage in broader cultural practices in later life[4]. As research has evolved, the academic community has gradually incorporated emotion into the analysis of capital. Emotional competence is regarded not merely as an individual psychological trait but also as a form of emotional capital that can be accumulated, transmitted, and converted into social advantages. Similar to cultural capital, emotional capital is embedded in daily life and is primarily produced and sustained through families and intimate social networks. From the perspective of George Herbert Mead's concept of the generalized other, individuals' emotional expression and regulation are not formed in isolation but are continuously constructed through interactions with others[5]. Accordingly, the family serves not only as the primary field of emotional socialization but also as the core mechanism for the accumulation and reproduction of emotional capital. Through daily interactions, the establishment of emotional norms, and reward-and-punishment mechanisms, parents guide their children to develop specific patterns of emotional expression and regulation strategies, which are gradually internalized as stable behavioral dispositions. Compared with cultural capital, the reproduction of emotional capital is more implicit and follows more diverse pathways.

Family background exerts significant class-based effects on the development of students' social and emotional competence. Research by Annette Lareau demonstrates that parents' social status systematically shapes children's upbringing experiences and developmental trajectories[6]. In general, higher socioeconomic status is associated with richer emotional capital provided by families. This stems partly from greater material resources and time investment, enabling parents to create more favorable developmental environments for their children, and partly from differences in parenting styles. Middle-class families tend to foster children's understanding and reflection on their own and others' emotions through communication, guidance, and negotiation, thereby promoting the internalization of emotional norms and the development of self-regulation abilities[7]. In contrast, lower-middle and working-class families, constrained by limited resources and practical

pressures, often emphasize behavioral discipline and obedience. Their children consequently have fewer opportunities to develop emotional expression and regulation skills and are more prone to emotional and behavioral problems[8]. Furthermore, emotion is not a neutral individual trait but a social resource embedded in structures of power and resource distribution. Positive emotional states facilitate individuals' access to greater social resources and developmental opportunities, whereas the accumulation of negative emotions may restrict their developmental potential, thereby reinforcing existing social stratification through intergenerational transmission. On this basis, this study proposes the following hypothesis:

H1: The higher the family's social class, the higher the level of students' social and emotional competence. Lower-middle and working-class families raise more students with low to moderate levels of social and emotional competence.

2.2. Reproduction Strategies of Social and Emotional Skills

Within Bourdieu's framework of reproduction theory, the family is regarded as a crucial mechanism for the intergenerational persistence of social inequality, shaping individual developmental trajectories through capital allocation and the transmission of habitus[9]. Social and emotional competence does not originate purely from within the individual, but is continuously produced and enacted in concrete social relations and contexts, thus possessing distinct socially constructed characteristics. From an action perspective, individual development depends on the ability to interact and adapt within relational networks; the core of education lies not only in the accumulation of abilities but also in coordination and adaptation within relationships. In this process, the family, as the primary and most critical social field, together with schools, communities, and other institutions, forms a support system that provides individuals with normative foundations, resource foundations, and psychological foundations. Specifically, the formation of students' social and emotional competence is achieved mainly through three pathways: first, the interpersonal pathway based on norm construction; second, the activity participation pathway relying on resource allocation; and third, the psychological support pathway centered on emotional regulation[10]. Due to differences in resource possession, parenting styles, and action strategies across social classes, these three pathways are unevenly distributed among different social groups. Accordingly, this study proposes the following hypothesis:

H2: Students from advantaged classes attain higher levels of interpersonal relations, activity participation, and psychological support than those from disadvantaged classes.

2.2.1. Interpersonal Relationship Strategies

Interpersonal relations serve as the core medium through which students engage in social interaction and internalize social norms. Families lay the foundation for social competence by establishing early emotional rules that guide children in learning emotional expression and regulation[11]. Supportive relationships furnish individuals with essential emotional resources, enhancing psychological resilience and facilitating the accumulation of emotional capital[12]. Parent-child relationships are fundamentally important in this regard: high-quality attachment contributes to the development of stable self-identity and sound social competence in children. Meanwhile, individuals are not entirely passive recipients of family norms; instead, there is room for negotiation and responsiveness within interactions. Upon entering peer contexts, individuals continuously adjust their emotions and behaviors through social comparison and interactive feedback. Existing research indicates that friendship significantly promotes emotional expression and coping abilities[13]. Teacher-student relationships, as an important bridge connecting family and school, also provide normative guidance and emotional support for students. Nevertheless, such

relational resources are unequally distributed across social classes: advantaged families can optimize their children's interpersonal environments through strategies such as school choice[14], whereas disadvantaged students are more likely to suffer from insufficient supportive relationships. Consequently, interpersonal relations exert a more pronounced influence on the social and emotional competence of disadvantaged students. On this basis, the following hypothesis is proposed:

H3: The social and emotional competence of students from disadvantaged classes is more strongly constrained by interpersonal relationships compared with students from other classes.

2.2.2. Activity Participation Strategies

Against the backdrop of intensifying educational competition, families have gradually shifted from single-dimensional cognitive cultivation to systematic investment in comprehensive competencies, especially in promoting children's behavioral attitudes and social abilities through organized activities. Middle to upper class families tend to adopt "outsourced" cultivation via off-campus institutions and various programs, such as enrolling children in extracurricular institutions, public cultural events, cross-border study tours, language courses, and cultural literacy programs. Such activities not only provide skill training but also foster students' emotional regulation and social adaptation through role division and normative constraints in real life contexts[15]. However, opportunities for activity participation are highly resource-dependent: family economic and time conditions directly determine the breadth and quality of participation[16]. Advantaged class families hold greater advantages in activity selection and sustained investment, while disadvantaged students face limited participation opportunities due to resource constraints, putting them at a disadvantage in social experience and competence development. Existing studies generally agree that participation in extracurricular activities helps expand social networks, enhance self-confidence, and improve cooperation and inclusiveness. Therefore, under unequal resource distribution, activity participation has become one important pathway through which class differences shape social and emotional competence. On this basis, the following hypothesis is proposed:

H4: The positive impact of activity participation on social and emotional competence may be stronger for middle to upper class students than for disadvantaged students.

2.2.3. Psychological Intervention Strategies

The family plays a central role in individuals' emotional socialization, as parents shape their children's patterns of emotional expression and regulation through emotional expectations and interaction styles[17]. Significant class differences exist in emotional parenting: middle class families emphasize interaction based on emotional understanding and intentional interpretation, using communication and guidance to encourage children to reflect on their own and others' emotions, thereby promoting the internalization of emotional norms and the development of self-regulation. In contrast, lower middle and working class families tend to prioritize behavioral discipline and obedience to authority, and their children are more likely to adapt to external demands through emotional suppression. Such differences constitute class-based emotional habitus that persists intergenerationally. Meanwhile, individuals exercise a certain degree of agency in this process. Children from advantaged classes usually possess stronger expressive capacity and self-awareness, allowing them to negotiate or even challenge authority within family interactions. This to some extent weakens the direct influence of parental psychological support, leading them to rely more on peer relationships for emotional support. By contrast, lower middle and working class students are more dependent on family support, and their social and emotional development is more easily affected by parental psychological support.Although teachers serve as important information

sources for students from disadvantaged backgrounds, teacher expectations also vary across social classes[18]. Disadvantaged students do not necessarily receive stronger psychological support from teachers. Meanwhile, the emotional responses cultivated in middle class children through early family cultural capital tend to align with teachers' emotional expectations. Nevertheless, compared with parental influence, the effect of teachers' psychological support may be limited. Accordingly, we hypothesize:

H5a: The social and emotional competence of upper class students may be more strongly influenced by psychological support from friends than from parents and teachers.

H5b: The social and emotional competence of lower middle and working class students may be more strongly influenced by psychological support from parents than from peers and teachers.

3. Research Design

3.1. Data Source

The data used in this study are drawn from the OECD Study on Social and Emotional Skills (SSES) database. The survey employed a stratified two-stage cluster sampling design. A total of 76 schools were sampled from 387 primary and nine-year schools with 10-year-old students, and 75 schools were selected from 88 general high schools and vocational schools. Based on student–teacher linkage lists provided by sampled schools, 50 age-eligible students were randomly selected from each school. In total, 7,268 students aged 10 and 15 completed the full assessment, representing 150,964 primary and secondary school students in Suzhou after weighting. Among them, 3,647 (50.2%) were aged 10 and 3,621 (49.8%) were aged 15[19]. Using STATA 15.1, student-, teacher-, and school-level data were matched, yielding 3,613 valid observations for the 15-year-old group after complete matching.

3.2. Variable Selection

3.2.1. Dependent and Categorical Variables

Social and emotional skills. Based on OECD assessment data, this study uses standardized scores (mean = 500, SD = 100) for 15 dimensions: self-control, responsibility, perseverance, stress resistance, optimism, emotional control, empathy, cooperation, trust, curiosity, creativity, tolerance, vitality, sociability, and assertiveness. Principal component analysis (PCA) is applied to construct a composite index of social and emotional skills as the dependent variable.

Socioeconomic status (SES). This variable is measured using three indicators: highest parental occupational status, highest parental educational attainment, and household wealth. The OECD provides a standardized SES index derived using PCA.

3.2.2. Independent Variables

Interpersonal relationships. This includes parent–child, peer, and teacher–student relationships. Parent–child relationships are measured using three items: "I often argue with my parents" "It is difficult for me to talk with my parents" and "I feel angry with my parents". Peer relationships are measured using four items: "My friends understand me" "My friends accept me as I am" "My friends are easy to talk to" and "My friends respect my feelings". Teacher–student relationships are measured using three items: "Most of my teachers treat me fairly" "I get along well with most of my teachers" and "Most of my teachers care about my well-being". Responses range from "almost never" to "almost always" coded from 1 to 4.

Psychological support. This includes parental, peer, and teacher support. Parental support is measured using items such as “My parents expect me to improve” and “My parents expect me to do better than others”. Peer support includes items such as “My friends expect more from me than I can give” and “My friends have high expectations of me”. Teacher support includes items such as “My teachers expect me to do better” and “My teachers have high expectations of me”. Responses range from “strongly disagree” to “strongly agree” coded from 1 to 4.

3.2.3. Covariates at Different Levels

This study controls for a range of covariates that may influence students’ social and emotional skills. At the individual level, variables include student gender, family socioeconomic status, bullying experiences, and sense of belonging. At the teacher level, variables include teacher gender, years of teaching experience, highest educational attainment, frequency of professional training, participation in social and emotional skills training, and teaching practices. At the school level, variables include principal leadership vision, availability of school activities, school commitment to improving social and emotional skills, implementation of social and emotional learning programs, and overall disruptive behaviors among students and teachers (Table 1).

Table 1: Basic Information of Variables.

Variable		N	Mean	SD	Min	Max	Cronbach’s α
Dependent Variable							
Students’ Social and Emotional Skills		3611	0.000	0.973	-3.052	4.981	
Independent Variables							
Individual Level	**Parent-Child Relationship**	3602	58.037	11.532	35.819	93.447	0.74
	Teacher-Student Relationship	3603	52.218	12.396	8.525	64.700	0.76
	Peer Relationship	3600	46.213	10.921	10.535	67.269	0.86
	Physical Activities	3612	1.590	0.492	1	2	
	Art Activities	3612	1.442	0.497	1	2	
	Social Activities	3612	1.434	0.496	1	2	
	Community Service Activities	3611	1.338	0.473	1	2	
	Environmental Protection Activities	3612	1.344	0.475	1	2	
	Parental Psychological Support	3610	3.573	.803	1	5	0.82
	Teacher Psychological Support	3609	3.212	.652	1	5	0.58
	Peer Psychological Support	3610	2.610	.710	1	5	0.62
Covariates							
Individual Level	**Student Gender**	3604	0.513	0.500	0	1	
	Family Socioeconomic Status	3604	0.261	0.820	-2.194	3.339	
	Bullying	3600	45.966	10.968	36.675	95.036	0.77
	Sense of Belonging	3602	44.688	10.791	4.169	80.379	0.76
Teacher Level	**Teacher Gender**	3460	0.361	0.480	0	1	
	Teaching Experience (Years)	3460	11.550	9.033	0	42	
	Highest Education Level	3460	5.326	0.606	2	7	

	Teacher Training Frequency	3453	3.080	1.135	1	5	
	Participation in SEL Training	3451	1.882	0.216	1	2	
	Teaching Methods	3459	49.404	8.758	28.714	58.740	0.85
School Level	**Principal's Vision**	3469	4.517	0.559	1.2	5	0.81
	Campus Activities	3469	1.900	0.126	1.556	2	
	School Commitment to SEL Improvement	3469	50.183	2.909	41.518	52.339	0.
	Implementation of SEL Instruction	3421	1.764	0.748	1	4	
	Student Disruptive Behavior	3420	51.307	3.703	45.333	56.361	0.83
	Teacher Disruptive Behavior	3420	51.622	2.863	46.441	54.312	0.75

3.3. Analytical Methods

Given the nested structure of the data—students nested within teachers, and teachers nested within schools—the assumption of independence required by traditional regression models is violated. Applying conventional regression would overestimate the effects of individual-level variables and underestimate standard errors. Hierarchical Linear Models (HLM), in contrast, account for both within-group and between-group variation, providing more accurate and appropriate estimates. This study constructs a three-level random intercept model (student–teacher–school) to examine the effects of individual factors on social and emotional skills across different family backgrounds. All models are estimated using the xtmixed command in STATA 15.1. The three-level model is specified as follows:

the null model:

$$Y_{ijk} = \pi_{0jk} + \varepsilon_{ijk} \quad (1)$$

$$\pi_{0jk} = \beta_{00k} + \nu_{0jk} \quad (2)$$

$$\beta_{00k} = \gamma_{000} + \mu_{00k} \quad (3)$$

the Level-1 random intercept model:

$$Y_{ijk} = \pi_{0jk} + \pi_{1jk}X_{1jk} + \cdots\cdots + \pi_{ijk}X_{ijk} + \varepsilon_{ijk} \quad (4)$$

the Level-2 random intercept model:

$$\pi_{0jk} = \beta_{00k} + \beta_{01k}Z_{1k} + \cdots\cdots + \beta_{0jk}Z_{Jk} + \upsilon_{0jk} \quad (5)$$

$$\pi_{ijk} = \beta_{i0k} + \beta_{i1k}Z_{1k} + \cdots\cdots + \beta_{ijk}Z_{Jk} + \upsilon_{ijk} \quad (6)$$

the Level-3 random intercept model:

$$\beta_{00k} = \gamma_{000} + \gamma_{001}M_{001} + \cdots\cdots + \gamma_{00k}M_{00k} + \mu_{00k} \quad (7)$$

$$\beta_{0jk} = \gamma_{010} + \gamma_{011}M_{011} + \cdots\cdots + \gamma_{0jk}M_{0jk} + \mu_{0jk} \quad (8)$$

$$\beta_{ijk} = \gamma_{1j0} + \gamma_{1j1}M_{1j1} + \cdots\cdots + \gamma_{ijk}M_{ijk} + \mu_{ijk} \quad (9)$$

In these models, Y represents students' social and emotional skills; π, β, γ are intercepts; $\sum$, $\{$, $\lceil$ are error terms; X represents Level-1 (student-level) variables, Z represents Level-2 (teacher-level) variables, and M represents Level-3 (school-level) variables. Indices i, j, and k refer to students, teachers, and schools, respectively. Thus, Y_{ijk} denotes the social and emotional skills of

student i, taught by teacher j, in school k.

4. Results and Analysis

4.1. Comparison of Social and Emotional Skills across Family Backgrounds

Family socioeconomic status (SES) was divided into three groups using equal intervals: disadvantaged (n = 984, 27.23%), middle (n = 2,378, 65.82%), and advantaged (n = 251, 6.95%). As shown in Figure 1, students' social and emotional skills increase with family SES: higher-status families are associated with higher levels of social and emotional skills, while lower-status families are associated with lower levels. The gap between advantaged and disadvantaged students is particularly pronounced. In terms of distribution, lower and middle status families account for a larger proportion of students with low to moderate levels of social and emotional skills. As shown in Figure 2, the proportions of students with high levels of social and emotional skills in the advantaged, middle, and disadvantaged groups are 7.57%, 3.26%, and 1.32%, respectively. By contrast, 90.56% of students from lower and middle status families fall into the low to moderate range. These findings support Hypothesis 1: higher family SES is associated with higher levels of social and emotional skills, while lower and middle status families tend to cultivate more students with relatively lower levels of such skills.

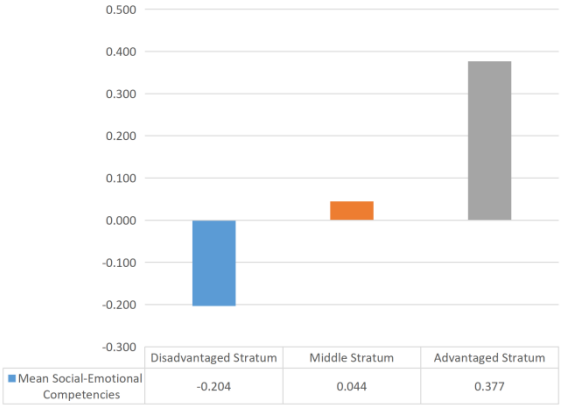

Figure 1: Social and Emotional Competencies of Students from Different Family Social Strata

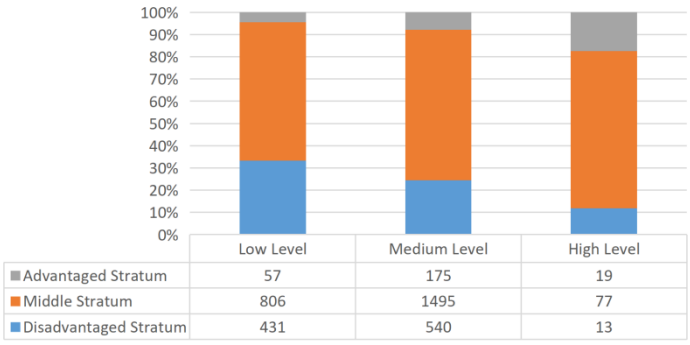

Figure 2: Class Distribution of Students with Different Levels of Social and Emotional Skills

4.2. Differences in Family Strategies for Developing Social and Emotional Skills

To examine class-based differences in strategies for developing students' social and emotional skills, this study analyzes variations in interpersonal relationships, activity participation, and psychological support. The results (Table 2) indicate that students from advantaged families exhibit

stronger interpersonal relationships — including parent – child, teacher – student, and peer relationships — than those from other groups (Scheffé tests, $p < 0.05$). In terms of activity participation, advantaged students participate more in sports activities than disadvantaged students (Scheffé test, $p < 0.05$), but show no significant difference compared with middle-status students ($p > 0.05$). They also participate more in arts, social activities, community service, and environmental protection activities than both other groups (Scheffé tests, $p < 0.05$). Regarding psychological support, no significant differences are found between lower and middle status students in parental or teacher support ($p > 0.05$), whereas advantaged students receive significantly higher levels of both parental and teacher support than the other groups ($p < 0.05$). In terms of peer support, disadvantaged students report higher peer expectations than advantaged students ($p < 0.1$), though the difference between disadvantaged and middle-status groups is not statistically significant ($p > 0.05$). Overall, compared with disadvantaged students, those from advantaged families demonstrate advantages in interpersonal relationships, activity participation, and parental and teacher support, but not in peer expectations, providing partial support for Hypothesis 2.

Table 2: Analysis of Differences in Strategies for Developing Students' Social-Emotional Competencies in Families of Different Social Strata.

Category		Disadvantaged Stratum	Middle Stratum	Advantaged Stratum	F
Interpersonal Relations	Parent-Child Relationship	59.008	57.890	55.523	9.48***
	Teacher-Student Relationship	49.483	53.053	55.117	36.65***
	Friend Relationship	43.981	46.757	49.945	38.39 ***
Activity Participation	Sports Activities	1.525	1.609	1.665	13.40 ***
	Art Activities	1.288	1.484	1.645	80.25***
	Social Activities	1.365	1.449	1.566	19.57***
	Community Service Activities	1.285	1.348	1.442	12.96 ***
	Environmental Protection Activities	1.291	1.355	1.446	12.65***
Psychological Intervention	Parental Psychological Support	3.557	3.564	3.719	4.53*
	Teacher Psychological Support	3.175	3.214	3.335	6.01**
	Friend Psychological Support	2.652	2.600	2.536	3.28*
Note: $^{+}$ p <0.1, * p <0.05, ** p <0.01, *** p <0.001 (two-tailed test); same as below.					

4.3. Class Heterogeneity in the Reproduction Strategies of Social and Emotional Skills

To examine the differential effects of interpersonal relationships, activity participation, and psychological support across social strata, a multinomial hierarchical linear model was estimated (Table 3). The null model shows that the intraclass correlation coefficients are ICC (teacher) ≈

0.043 and ICC (school) ≈ 0.047, indicating that approximately 4.3% and 4.7% of the variance in students' social and emotional skills can be attributed to differences between teachers and schools, respectively. Compared with conventional linear regression, the three-level null model provides a better fit (χ^2 = 13.79, p < 0.000).

Table 3: Class Heterogeneity Model of Reproduction Strategies for Students' Social-Emotional Competence.

Category & Variable		Stratified Sample Model			Full Sample Model
		Disadvantaged Stratum	Middle Stratum	Advantaged Stratum	
Null Model	Student-level variance	.860			
	Teacher-level variance	.038			
	School-level variance	.045			
Rationality test vs. general linear model		chi2 = 13.79***			
Student-level variance		.368	.490	.625	.439
Interpersonal Relationship	Parent-child relationship	-.013*** (.002)	-.012*** (.001)	-.004 (.005)	-.011*** (.001)
	Teacher-student relationship	.006** (.002)	.004** (.001)	.005 (.005)	.005*** (.001)
	Friend relationship	.015*** (.002)	.013*** (.002)	.012* (.005)	.013*** (.001)
Activity Participation	Sports activities	-.016 (.044)	.158*** (.034)	-.060 (.123)	.092*** (.027)
	Art activities	.084+ (.046)	.042 (.032)	.076 (.119)	.054* (.026)
	Social activities	.075 (.049)	.023 (.036)	.085 (.124)	.050+ (.028)
	Community service activities	.103* (.052)	.143*** (.038)	.052 (.145)	.124*** (.031)
	Environmental protection activities	.045 (.051)	.091* (.037)	.215 (.142)	.091** (.030)
Psychological Intervention	Parental psychological support	.166*** (.030)	.043+ (.022)	.109 (.075)	.083*** (.017)
	Teacher psychological support	-.022 (.037)	.041 (.029)	-.007 (.093)	.015 (.022)
	Friend psychological support	-.071* (.034)	-.077** (.022)	.176* (.075)	-.060*** (.018)
Intercept		-2.478*** (.240)	-2.790*** (.168)	-3.251*** (.632)	-2.772*** (.134)
Student-level variance		.310	.426	.542	.419
Wald Chi-square test		1176.47***	3226.49***	263.90***	3706.04***
R^2 change		15.76%	13.06%	13.28%	4.56%

Note: This table shows changes in model variance and regression coefficients, with standard errors in parentheses.

As shown in Table 3, regarding interpersonal relationships, peer relationships significantly promote social and emotional skills across all groups, with stronger effects among lower and middle status students than among advantaged students. Teacher – student relationships improve social and emotional skills only for lower and middle status students, with slightly stronger effects for disadvantaged students. Parent – child relationships significantly enhance social and emotional skills for disadvantaged and middle-status students, but show no significant effect for advantaged students. Overall, students from disadvantaged backgrounds are more susceptible to the influence of surrounding interpersonal relationships, with stronger effects of parent – child, teacher – student, and peer relationships compared to other groups, supporting Hypothesis 3.

In terms of activity participation, participation in sports significantly promotes social and emotional skills among middle-status students, while effects for other groups are not significant. Participation in arts and community service activities has notable positive effects for disadvantaged students, whereas community service and environmental protection activities significantly benefit middle-status students. Compared with disadvantaged students, middle-status students are more strongly influenced by participation in most activities, except for arts and social activities. For advantaged students, participation in these activities does not significantly affect their social and emotional skills; however, in the full-sample model, these activities are generally beneficial. These findings do not support Hypothesis 4 and suggest substantial heterogeneity in the effects of activity participation across social strata.

Regarding psychological support, parental support plays a significant role in promoting social and emotional skills among lower and middle status students, with particularly strong effects for disadvantaged students, supporting Hypothesis 5b. Teacher support shows no significant effects across groups. Although disadvantaged students report higher peer expectations than advantaged students, these effects are negative; in contrast, for advantaged students, peer support—despite being relatively lower—has a stronger positive impact on social and emotional development, supporting Hypothesis 5a. Overall, the full-sample model indicates that parental and peer psychological support are important factors in students' development, although the role of peer support varies across social strata.

5. Conclusions and Discussion

5.1. Main Findings

This study finds that the development of students' social and emotional skills is closely associated with family social class: the higher the family's social status, the higher the level of students' social and emotional skills. The reproduction of these skills operates through three main pathways – interpersonal relationships, activity participation, and psychological support. Compared with disadvantaged groups, students from advantaged families demonstrate clear advantages in interpersonal relationships, levels of activity participation, and parental and teacher support, though not in peer support. Regarding interpersonal relationships, students from lower and middle status families are more susceptible to the influence of surrounding relationships, and these relationships exert stronger effects on their social and emotional development than for other groups. In terms of activity participation, although advantaged students engage in a wider range of activities, students from lower and middle status families benefit more from participation in sports, community service, and environmental protection activities. With respect to psychological support, parental support plays a more significant role in promoting social and emotional skills among lower and middle status students. Although these students report relatively higher levels of peer support, such support has little positive effect on their development. In contrast, peer support among advantaged students contributes more positively to their social and emotional skills. Teacher support shows no significant effects across social strata.

5.2. Discussion and Implications

Interpersonal relationships provide the fundamental context for the development of students' social and emotional skills, as individuals practice, receive feedback, and adjust their competencies through social interaction. Although students from advantaged families report higher-quality parent – child relationships, these do not translate into stronger effects on social and emotional

development. This may reflect the argument that children are not entirely passive agents (Atkinson, 2014; Berry, 2015). As Lareau (2018) notes, children from advantaged families often possess stronger linguistic resources, enabling them to negotiate or resist parental control, which may weaken the effectiveness of parental regulation and, by extension, parental psychological support. In contrast, parent–child relationships exert stronger effects among lower and middle status students, possibly due to higher levels of compliance with parental authority.

Although students from advantaged backgrounds report higher-quality teacher–student relationships, those from lower-middle and working-class families benefit more from such interactions. This may reflect class-based differences in educational orientations: disadvantaged families tend to place greater trust in teacher authority, and their children are more likely to internalize teacher guidance rather than treat it as optional. Peer relationships show consistently positive effects across all groups, with stronger impacts among lower-middle and working-class students. Compared with hierarchical parent–child relations, peer interactions are more reciprocal and context-dependent[20], serving as an important compensatory resource when family support is limited.

In terms of activity participation, the advantages of higher-class families do not translate into stronger gains in social and emotional competence; instead, middle-class students benefit the most. This may be attributed to the over-structured cultivation strategies of advantaged families, where densely scheduled activities emphasize efficiency and quantity over meaningful engagement, thereby weakening students' initiative[21] In contrast, middle-class families are more likely to treat organized activities as developmental opportunities, while disadvantaged students face constraints in both access and quality of participation. Notably, group-based activities—such as sports, community service, and environmental initiatives—have stronger positive effects, as they foster collaborative environments characterized by peer interaction, effort, and mutual support[22].

Regarding psychological support, parental support plays a more significant role for lower-middle and working-class students, while its effect is weaker among advantaged groups. Peer support, however, exhibits divergent patterns: it positively influences advantaged students but shows limited or no positive effects among disadvantaged groups. This suggests that peer networks are stratified in quality, with disadvantaged students less able to access supportive social capital. Teacher psychological support shows no significant effect across groups, possibly because students perceive such support as lacking authenticity, limiting the internalization of teacher expectations[23].

These findings have important policy implications. The *Family Education Promotion Law* provides a framework for strengthening family–school–community collaboration. Interventions should be differentiated by social class. For lower-middle and working-class families, efforts should focus on improving the quality of key relationships and expanding access to meaningful activity participation. For advantaged families, greater attention should be paid to the quality of emotional interaction and the developmental value of activities, rather than their frequency or intensity. Schools should also promote group-based activities and optimize peer network structures through cross-group interaction. In addition, enhancing the authenticity and effectiveness of teacher support is essential to better align it with students' developmental needs.

This study has several limitations. It focuses on three primary pathways and does not capture the full complexity of influencing factors. Future research should incorporate more comprehensive data and mixed methods to examine additional mechanisms. Moreover, this study emphasizes direct strategies while giving limited attention to indirect processes of capital transmission. Further research should consider student agency to develop a more complete explanatory framework for the development of social and emotional competence.

References

[1] Yuan, Z. (2021). Attach great importance to the cultivation of social and emotional abilities: Laying the foundation for success and happiness in life. Journal of the Chinese Society of Education, 2, 5. (in Chinese)

[2] Kankaraš, M. and J. Suarez-Alvarez (2021). Assessment framework of the OECD Study on Social and Emotional Skills. OECD Education Working Papers, No. 207, OECD Publishing, Paris.

[3] OECD (2021). Beyond Academic Learning: First Results from the Survey of Social and Emotional Skills. Paris:OECD Publishing, 9, 52-59.

[4] Bourdieu, P., & Passeron, J.-C.(2002). Reproduction in education, society and culture. Trans. Xing, K. Beijing: The Commercial Press, 54.

[5] Mead, G. H. (2013). Mind, self, and society. Trans. Huo, G. Beijing: Beijing United Publishing Company,170.

[6] Lareau, A. (2018). Unequal childhoods: Class, race, and family life (2nd ed). Trans. Song, L. Beijing: Peking University Press, 281-355.

[7] Bernstein, B. (2003). Class, codes, and control: Towards a theory of educational transmission. London: Routledge, 42.

[8] Kohn M L. (1971). Class and Conformity: A Study in Values. Journal of Marriage and Family, 1, 1127.

[9] Bourdieu, P. (2015). Distinction: A social critique of the judgement of taste. Trans. Liu, H. Beijing: The Commercial Press, 114.

[10] Goodwin E J. (1996). Symbols, Positions, Objects: Toward a New Theory of Revolutions and Collective Action. History & Theory, 3, 358.

[11] Hochschild, A. (1983). The managed heart. Berkeley: University of California Press, 35.

[12] Prowell, A. N. (2021). Capital development within supportive adult relationships: Processes of positive adaptation for marginalized youth. Journal of Human Behavior in the Social Environment, 1-19.

[13] Yang, C., Mao, Y., & Liu, J. (2017). The impact of friendship relationships on social emotional competence of rural primary school students in western China: The moderating role of class social network density. Chinese Journal of Special Education, 1, 85-90. (in Chinese)

[14] Trottier, P. (2016). Relationships make the difference: Connect with your students and help them build social, emotional and academic skills. Pembroke Publishers, 5-6.

[15] COLLAS, T. (2013). The Clientele of Private Tutoring: Private Lessons and the Family Shaping of Schooling. French Review of Sociology, 3, 465-506.

[16] White A M , Gager C T (2007). Idle Hands and Empty Pockets? Youth Involvement in Extracurricular Activities, Social Capital, and Economic Status. Youth & Society, 1, 75-111.

[17] Trettevik, R. (2016). Identities, Goals, and Emotions. Social Psychology Quarterly, 3, 263-283.

[18] Gershenson, S., Holt, S. B., & Papageorge, N. W. (2016). Who believes in me? the effect of student–teacher demographic match on teacher expectations. Economics of Education Review, 209-224.

[19] Yuan, Z., Huang, Z., Li, J., & Zhang, J. (2021). Report on the development level of social and emotional competence of Chinese adolescents. Journal of East China Normal University (Educational Sciences) ,9, 1-32. (in Chinese)

[20] Bukowski, W. M., Buhrmester, D., & Underwood, M. K. (2011). Peer relations as a developmental context// M. K. Underwood & L. H. Rosen (eds.).Social development: Relationships in infancy, childhood, and adolescence. New York, NY: Guilford Press, 153-179.

[21] Ritzer, G. (1983). The McDonaldization of society.Journal of American Culture, 1, 100-107.

[22] Howie, L. D., Lukacs, S. L., Pastor, P. N., Reuben, C. A., & Mendola, P. (2010). Participation in activities outside of school hours in relation to problem behavior and social skills in middle childhood. The Journal of School Health, 3, 119-125.

[23] Babad, E. (1990). Measuring and changing teachers' differential behavior as perceived by students and teachers. Journal of Educational Psychology, 4, 683-690.