

Parental Communication And Academic Achievement Among O/A-Level Students

Rashida Pervaiz ¹, Dr. Nidhi Agarwal ²

¹ Department of Education, Faculty of Social Sciences, Arts and Humanities

Lincoln University College Selangor, Malaysia

rashida.pervaiz001@gmail.com/ rpervaiz.phdscholar@lincoln.edu.my

² Professor Lincoln University College Selangor, Malaysia

dr.nidhi@lincoln.edu.my

HOW TO CITE:

Rashida Pervai, Nidhi Agarwal (2026), Parental Communication And Academic Achievement Among O/A-Level Students

International Journal of Special

Education, 41(21s), 284 - 300

ABSTRACT:

Parental relationships and home learning environments can be influential on students' socio-emotional functioning and engagement in the learning process. But the mechanisms whereby certain aspects of the parent-child relationship are related to students' academic experiences are limited in their understanding. This study investigated the links between parental communication, conflict resolution, emotional support, academic guidance at home, financial capacity and learning conditions, socio-emotional well-being, academic engagement and academic achievement of O/A-level students. An ex-post facto design with a quantitative cross-sectional approach was used with a sample of 100 students. Descriptive statistics, Cronbach's alpha, Spearman's correlation, diagnostics for multicollinearity, ordinary least squares regression, ordinal logistic regression, and bootstrapped mediation analysis (5,000 resamples) were used for the analysis. The results revealed good internal consistency for all constructs ($\alpha = .768 - .921$). Academic engagement ($\rho = .509, p < .001$) was positively associated with socio-emotional well-being, and was the strongest significant predictor of academic engagement ($B = 0.325, p < .001$), explaining 35.3% of the variance. The indirect effect of emotional support on academic engagement via socio-emotional well-being was significant ($B = 0.176, 95\% \text{ CI } [0.079, 0.291]$) and accounted for 51.18% of the total effect. Predictors of academic achievement, however, were not significant. The results underscore the significance of emotional support and socio-emotional wellbeing in boosting students' academic involvement and call for family-oriented educational interventions to focus on students' emotional needs along with their academic needs.

Keywords: academic achievement, academic engagement, emotional support, parental relationships, socio-emotional well-being

COPYRIGHT STATEMENT:

Copyright: © 2026 Authors.

Open access publication under the terms and conditions of Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

Classroom learning and students' individual capacity to learn also have an impact on the learning outcomes of students, but the quality of

the relationship and the quality of the students' learning environment in the home are also factors. Parents/carers have the ability to influence students' learning experiences through

communication, emotional support, academic guidance, conflict management and providing appropriate learning resources. Previous studies have consistently found that parental involvement relates to students' academic performance, but the nature of the relationship depends on the type and quality of parental involvement. For instance, a meta-analysis conducted by Fan and Chen (2001) revealed a small-to-moderate but significant relationship between parental involvement and academic achievement, and parent-child communication and parental educational expectations with achievement had more important relationships.

The family environment is especially significant in adolescence and during the passage into secondary school when young people assume more independence yet still need the emotional and educational support of their parents. Having positive communication with their parents can give students opportunities to talk about school matters, voice their opinions, ask for advice, and build confidence in navigating school issues. On the other hand, frequent family disagreements or difficult communication or neglecting school-related issues can make it harder for students to focus and participate in school activities. Studies of interparental conflict have also highlighted the link between family conflict and children's and adolescents' emotional adjustment and developmental outcomes (Grych & Fincham, 2001; Harold & Conger, 1997).

Another aspect of the home environment is parental emotional support. Students who think their parents are supportive are likely to be better equipped to handle academic stress, deal with failures and have positive attitudes towards studying. Conversely, poor emotional support can make it more difficult for students to manage stress and challenges in school. This connection is especially important for socio-emotional well-being, including students' feelings of optimism, calm, confidence, meaningfulness, connectedness, and the capacity to function effectively in daily life. In addition, there is a growing body of research that highlights the importance of socio-emotional processes for school engagement and academic outcomes;

research findings suggest that students' engagement and academic outcomes are linked to supportive relationships and socio-emotional security.

Home-based academic support can also enhance students' learning experiences. Parents can facilitate learning by inquiring about student progress, assisting students in setting goals, supporting learning outside of the classroom, and providing extra support as needed. Parental involvement, however, is complex and can vary in type and quality, and thus, may have varying impacts. Fan and Chen (2001) found that the relationships of various types of parental involvement with academic achievement are not equivalent. Likewise, studies of parental involvement have focused on the context within which parental involvement takes place, and the broader context of parental involvement is important to understand in terms of students' educational outcomes (Darling & Steinberg, 1993; Steinberg et al., 1992).

Another factor in the home learning environment that is relevant is socioeconomic conditions. Families are not all equal when it comes to books, Internet access, educational fees, appropriate study areas and other academic assistance. There is a consistent relationship between socioeconomic status and academic performance in educational research (Sirin, 2005). Financial resources should not be viewed alone, however, as the educational impacts of socioeconomic factors may have interactions with parental support, emotional experiences of students, and the overall learning environment.

Importantly, academic engagement may be a more immediate educational outcome, through which family and socio-emotional factors are reflected in students' academic behavior. Engagement is related to behaviours such as completing assignments, revising regularly, being involved in lessons, focussing on study and organising study time effectively. Research on SEL also indicates that there are links between SEL and school functioning and learning outcomes.

Although there has been extensive research exploring the role of parental involvement in student achievement, an important question that has not been sufficiently studied is how the various aspects of the home environment interrelate and whether students' socio-emotional well-being serves as a pathway for linking parental support to academic engagement. The current literature has focused on parental involvement or socioeconomic status as fairly general factors and has looked at how these factors relate to achievement. Less emphasis has been placed on the need to take parental communication, conflict resolution, emotional support, academic guidance, financial learning environments, socio-emotional well-being and academic engagement into account in an integrated manner. In addition, recent systematic evidence also underscores the need for a focus on mediators and moderators in the socio-emotional security-school related outcome relationship.

Purpose and Objectives of the Study

Against this background, the present study examines the relationships among Parental Communication, Conflict Resolution, Emotional Support, Academic Guidance at Home, Financial Capacity and Learning Conditions, Socio-emotional Well-being, Academic Engagement, and Academic Achievement among students. Particular emphasis is placed on determining whether socio-emotional well-being functions as a mediating mechanism between emotional support and academic engagement.

The study specifically aims to:

1. examine the relationships between parental and home-environment factors and students' socio-emotional well-being;
2. determine the association between socio-emotional well-being and academic engagement;
3. examine the extent to which parental and home factors predict academic engagement and academic achievement; and

4. investigate whether socio-emotional well-being mediates the relationship between parental emotional support and academic engagement.

By addressing these objectives, the study seeks to provide a more integrated understanding of how students' family environments and socio-emotional experiences are associated with their educational engagement and performance. The findings may also inform family-oriented and school-based approaches that seek to strengthen students' academic participation while recognizing the importance of their emotional and relational needs.

Methodology

Research Design

The study used a quantitative and cross sectional research design to investigate the relationships between parental relationship factors, home learning conditions, socio-emotional well-being, academic engagement, and academic achievement. The design was appropriate since the study aimed to determine the level of students' perception and to analyze statistical associations and predictive relationships between the study variables. The 100 completed questionnaire responses were used for the empirical analysis of the present study. The original thesis suggested a larger sample, but the results reported in the journal article are from the 100 respondents whose data were analyzed.

The study was non-experimental and cross sectional, and the statistical relationships found in the analysis are viewed as associations, not causation. Aside from testing direct relationships between variables, the study tested a proposed mediation pathway that examined socio-emotional well-being as a possible mediator between parental emotional support and academic engagement.

Participants and Sample

The students were 100 O/A-Level students. This is the educational phase chosen because students in this stage are facing growing demands in their learning and taking significant

decisions on their future education and career choices. The target population for this thesis was identified as students studying O/A-levels.

The subjects were selected by including those who had responded to the structured student questionnaire and provided usable responses for the study variables. Prior to data preparation, there were 64 recorded variables and 100 respondents in the final dataset. After screening and preparation, 47 Likert items were selected for the construction of seven main study variables.

Academic achievement was examined separately as it was measured as an ordinal categorical variable. Students who reported A/A-, B, C, and E* were assigned coded values of 4, 3, 2, and 1, respectively, and those who chose "Not Sure" were coded as missing. Therefore, academic achievement analyses were performed on 90 valid observations, and 10 observations were omitted due to the lack of information about academic achievement.

Instruments

Data was gathered by means of a structured student questionnaire that was based on the major variables of the research framework. The questionnaire consisted of demographic and background questions, followed by statements on parental relations, home learning environment, socio-emotional health, and academic involvement that were measured on a Likert scale. The attitudinal statements were assessed on a five-point Likert scale from 1 = Strongly Disagree to 5 = Strongly Agree.

The questionnaire operationalized seven principal constructs:

1. Parental Communication — 8 items
2. Conflict Resolution — 7 items
3. Emotional Support — 8 items
4. Academic Guidance at Home — 6 items
5. Financial Capacity and Learning Conditions — 5 items
6. Socio-emotional Well-being — 7 items

7. Academic Engagement — 6 items

Together, these constituted 47 Likert-scale items.

Parental Communication measured listening, openness, discussion of academic decisions, respectful disagreement, explanation of study-related expectations and understanding of students' academic concerns. Constructive management of family disagreements, acknowledgement of mistakes, respectful handling of family problems, and disruptive conflict (present or absent) were evaluated by Conflict Resolution. Emotional Support measured encouragement, recognition of stress, appreciation of effort, emotional reassurance, examination-related motivation and students' ability to discuss school-related anxiety with parents.

Academic Guidance at Home and Financial Capacity and Learning Conditions evaluated the academic support that students had at home and the financial capacity and learning conditions that families could provide. Socio-emotional Well-being measured the students' recent experiences of optimism, calmness, confidence, clear thinking, positive mood, family connectedness, and meaningfulness. Academic Engagement measured homework completion, revision, class participation, concentration, management of study time and avoidance of study tasks.

Students' overall most recent result, as reported, was used as a separate measure of academic achievement. Additionally, the questionnaire gathered data on the approximate average grade or percentage of students (where available).

Procedure

The data was obtained with the use of structured questionnaire which was administered to students. The study framework was based on the principle of voluntary participation and confidentiality and informed participation and non-coercion. The responses were then consolidated into a structured data set for quantitative analysis.

The analysis process was a series of steps. The data was initially checked for completeness,

consistency and duplicate answers. The first data set had 100 respondents and 64 variables. There were no duplicate-response screening errors in the 5 individual questionnaire items that had one missing response each.

Second, the responses on the Likert scale were translated into a number between 1 and 5. Items with negative wording were located and reverse coded to ensure that higher scores on the items in these cases indicated more favorable levels of the corresponding construct. There were 13 items identified that were reverse coded. The items were then averaged within each construct to create composite construct scores that have the same metric as the original items (1–5).

Third, academic achievement responses were recoded on the four-level ordinal scale outlined above. The analytical data thus obtained were then analyzed descriptively, correlatively, regression and mediation.

Data Analysis

Python was used for all quantitative analyses. The analytical approach was descriptive and inferential statistical method to answer the study objectives.

Descriptive statistics were computed for each of the seven composite constructs, including the number (N), the mean, standard deviation, minimum and maximum values. Categorical variables and academic achievement were also analysed using frequency distributions.

Finally, a bootstrapped mediation analysis was used to explore whether the relationship between Emotional Support and Academic Engagement was mediated by Socio-emotional Well-being. The mediation analysis was conducted with 5,000 bootstrap samples and the indirect effect was assessed by a bootstrap 95% confidence interval. The indirect pathway was deemed to be

Results

The results are reported as per the objectives of the study and the statistical analysis plan. The number of student respondents was 100. The questionnaire was comprised of 47 Likert-type items across seven constructs of the study. The

Second, Cronbach's alpha was used to assess the internal consistency of the multi-item constructs. The reliability of initial item-level diagnostics was explored when it was low. After the last reverse coding, the internal consistency of the seven constructs ranged from .768 to .921 for Cronbach's alpha.

Third, Spearman's rank-order correlation was conducted to explore the direction and strength of the relationships between the study constructs. This was chosen because the principal measures were based on Likert-type composite scores and academic achievement was considered an ordinal measure.

Fourth, before the multivariable regression analyses, multicollinearity diagnostics were performed with variance inflation factor (VIF) and tolerance values. These diagnostics were carried out to ascertain if there was too much overlap among the explanatory variables and whether it could affect the estimates of regression.

Fifth, ordinary least squares (OLS) regression was employed to explore the predictors for Academic Achievement, Socio-emotional Well-being, and Academic Engagement. As a robustness analysis, another ordered logistic regression model was estimated since Academic Achievement was measured as an ordered categorical variable.

statistically supported if the confidence interval did not contain the null value.

This analytic process allowed the study to look at the direct statistical relationships between the parental and educational variables, as well as the proposed indirect pathway through Socio-emotional Well-being, which is a key part of the study's conceptual framework.

academic achievement data was available for 90 respondents; ten respondents chose "Not Sure" and were thus not included in analyses involving the achievement variable.

Respondent Characteristics

The distribution of reported academic achievement is presented in Table 1. Among the 100 respondents, 53 (53.0%) reported an A*/A– result, 31 (31.0%) reported a B, 4 (4.0%) reported

a C, and 2 (2.0%) reported an E. Ten respondents (10.0%) selected “Not Sure.” The latter responses were treated as missing for subsequent academic-achievement analyses.

Table 1. Distribution of Respondents by Reported Overall Academic Achievement

Academic achievement	n	%	Coded value
A*/A–	53	53.0	4
B	31	31.0	3
C	4	4.0	2
E	2	2.0	1
Not Sure	10	10.0	Missing
Total	100	100.0	—

Note. Academic achievement was coded as A*/A– = 4, B = 3, C = 2, and E = 1. “Not Sure” responses were treated as missing in inferential analyses.

Reliability Analysis

Cronbach’s alpha coefficients were calculated for the seven multi-item constructs. The final analysis included 47 Likert-type items.

Cronbach’s alpha values ranged from .768 to .921. The coefficients were .815 for Parental Communication, .906 for Conflict Resolution, .892 for Emotional Support, .768 for Academic Guidance at Home, .768 for Financial Capacity and Learning Conditions, .921 for Socio-emotional Well-being, and .808 for Academic Engagement.

Table 2. Internal Consistency Reliability of the Study Constructs

Construct	Number of items	Cronbach’s α
Parental Communication	8	.815
Conflict Resolution	7	.906
Emotional Support	8	.892
Academic Guidance at Home	6	.768
Financial Capacity & Learning Conditions	5	.768
Socio-emotional Well-being	7	.921
Academic Engagement	6	.808
Overall range	47	.768–.921

Note. Cronbach’s alpha was calculated using the final reverse-coded dataset.

Descriptive Statistics

Descriptive statistics for the seven study constructs are presented in Table 3. Financial

Capacity and Learning Conditions recorded the highest mean score ($M = 4.008$, $SD = 0.798$). Parental Communication had a mean of 3.764 ($SD = 0.763$), followed by Emotional Support (M

= 3.711, $SD = 0.935$) and Academic Guidance at Home ($M = 3.708$, $SD = 0.777$). Academic Engagement had a mean of 3.348 ($SD = 0.740$),

while Conflict Resolution had a mean of 3.297 ($SD = 1.051$). Socio-emotional Well-being had a mean of 3.256 ($SD = 0.932$).

Table 3. Descriptive Statistics of the Study Constructs

Construct	N	M	SD	Minimum	Maximum
Parental Communication	100	3.764	0.763	1.500	5.000
Conflict Resolution	100	3.297	1.051	1.000	5.000
Emotional Support	100	3.711	0.935	1.250	5.000
Academic Guidance at Home	100	3.708	0.777	1.500	5.000
Financial Capacity & Learning Conditions	100	4.008	0.798	2.000	5.000
Socio-emotional Well-being	100	3.256	0.932	1.000	5.000
Academic Engagement	100	3.348	0.740	1.333	5.000

Note. M = mean; SD = standard deviation. Construct scores were calculated as the mean of the items belonging to each construct. Scores range from 1 to 5.

Correlation Analysis

Spearman's rank-order correlations were calculated among the seven principal constructs. All pairwise associations were positive and statistically significant. The largest correlation was observed between Parental Communication and Emotional Support ($\rho = .776$, $p < .001$),

followed by Emotional Support and Academic Guidance at Home ($\rho = .708$, $p < .001$). Socio-emotional Well-being was significantly correlated with Academic Engagement ($\rho = .509$, $p < .001$). The correlation between Financial Capacity and Learning Conditions and Academic Engagement was comparatively smaller but remained statistically significant ($\rho = .217$, $p = .030$).

Table 4. Spearman Correlations Among Study Constructs

Variable	1	2	3	4	5	6	7
1. Parental Communication	1.000	.514	.776	.611	.438	.292	.401
2. Conflict Resolution	.514	1.000	.631	.579	.540	.370	.305
3. Emotional Support	.776	.631	1.000	.708	.533	.438	.419
4. Academic Guidance at Home	.611	.579	.708	1.000	.596	.365	.394
5. Financial Capacity & Learning Conditions	.438	.540	.533	.596	1.000	.278	.217
6. Socio-emotional Well-being	.292	.370	.438	.365	.278	1.000	.509
7. Academic Engagement	.401	.305	.419	.394	.217	.509	1.000

Note. $N = 100$. Values are Spearman's rank-order correlation coefficients (ρ). $p < .05$, $p < .01$, $p < .001$.

Multicollinearity Diagnostics

Variance inflation factor (VIF) and tolerance values were calculated for the variables included

in the multivariable models. VIF values ranged from 1.473 to 3.869, while tolerance values ranged from 0.258 to 0.679. The highest VIF was observed for Emotional Support (3.869).

Table 5. Multicollinearity Diagnostics for Study Variables

Variable	VIF	Tolerance
Parental Communication	2.671	0.374
Conflict Resolution	1.886	0.530
Emotional Support	3.869	0.258
Academic Guidance at Home	2.344	0.427
Financial Capacity & Learning Conditions	1.473	0.679
Socio-emotional Well-being	1.752	0.571
Academic Engagement	1.477	0.677

Note. VIF = variance inflation factor.

Predictors of Academic Achievement

An OLS regression model was estimated using Academic Achievement as the dependent variable. The analysis included 90 valid observations. The overall model was not statistically significant, $F(7, 82) = 0.740, p = .639$,

with $R^2 = .059$ and adjusted $R^2 = -.021$. None of the seven predictors reached the .05 significance level. Academic Engagement had the largest positive coefficient ($B = 0.183, p = .136$), while Financial Capacity and Learning Conditions had a negative coefficient ($B = -0.169, p = .138$).

Table 6. OLS Regression Predicting Academic Achievement

Predictor	B	SE	t	p
Constant	3.37	0.495	6.825	< .001
Parental Communication	0.02	0.162	0.158	.875
Conflict Resolution	0.03	0.100	0.320	.750
Emotional Support	0.04	0.165	0.258	.797
Academic Guidance at Home	-0.00	0.14	-0.05	.95
Financial Capacity & Learning Conditions	-0.16	0.11	-1.49	.13
Socio-emotional Well-being	-0.04	0.10	-0.40	.68
Academic Engagement	0.183	0.12	1.50	.13

Note. $N = 90$. $R^2 = .059$; adjusted $R^2 = -.021$; $F(7, 82) = 0.740, p = .639$.

An additional ordered logistic regression was estimated for Academic Achievement. None of the seven predictor coefficients reached statistical significance at the .05 level. The largest positive coefficient was observed for Academic Engagement ($B = 0.637$, $p = .107$), while Financial Capacity and Learning Conditions had a coefficient of -0.537 ($p = .114$).

Predictors of Socio-Emotional Well-Being

Table 7. OLS Regression Predicting Socio-Emotional Well-Being

Predictor	B	SE	t	p
Constant	0.87	0.48	1.79	.07
Parental Communication	-0.09	0.16	-0.59	.55
Conflict Resolution	0.05	0.11	0.50	.61
Emotional Support	0.40	0.16	2.48	.01
Academic Guidance at Home	0.17	0.16	1.08	.28
Financial Capacity & Learning Conditions	0.10	0.12	0.83	.40

Note. $N = 100$. $R^2 = .317$; adjusted $R^2 = .281$; $F(5, 94) = 8.720$, $p < .001$.

Predictors of Academic Engagement

The OLS regression model predicting Academic Engagement was statistically significant, $F(6, 93) = 8.445$, $p < .001$, with $R^2 = .353$ and adjusted R^2

The OLS model predicting Socio-emotional Well-being was statistically significant, $F(5, 94) = 8.720$, $p < .001$, and explained 31.7% of the variance ($R^2 = .317$; adjusted $R^2 = .281$). Emotional Support was the only statistically significant predictor in the model ($B = 0.400$, $SE = 0.161$, $t = 2.489$, $p = .015$). The remaining predictors did not reach statistical significance.

$= .311$. Socio-emotional Well-being was statistically significant ($B = 0.325$, $p < .001$). Parental Communication had a positive coefficient ($B = 0.246$, $p = .053$), while the other predictors did not reach the .05 significance level.

Table 8. OLS Regression Predicting Academic Engagement

Predictor	B	SE	t	p
Constant	1.23	0.38	3.21	.00
Parental Communication	0.24	0.12	1.95	.05
Conflict Resolution	-0.03	0.08	-0.38	.69
Emotional Support	-0.01	0.12	-0.09	.92
Academic Guidance at Home	0.13	0.12	1.02	.31
Financial Capacity & Learning Conditions	-0.05	0.09	-0.52	.59

Socio-emotional Well-being	0.32	0.08	4.05	< .00
----------------------------	------	------	------	-------

Note. $N = 100$. $R^2 = .353$; adjusted $R^2 = .311$; $F(6, 93) = 8.445$, $p < .001$.

Mediation Analysis

A bootstrapped mediation analysis was conducted to examine the indirect association between Emotional Support and Academic Engagement through Socio-emotional Well-being. The analysis used 5,000 bootstrap samples.

Emotional Support significantly predicted Socio-emotional Well-being (path a : $B = 0.540$, $SE =$

0.085 , $p < .001$), and Socio-emotional Well-being significantly predicted Academic Engagement after controlling for Emotional Support (path b : $B = 0.326$, $SE = 0.080$, $p < .001$). The total effect was $B = 0.343$ ($SE = 0.072$, $p < .001$), and the direct effect was $B = 0.168$ ($SE = 0.080$, $p = .038$). The indirect effect was 0.176 , with a 95% bootstrap confidence interval of $[0.079, 0.291]$.

Table 9. Bootstrapped Mediation Analysis of Socio-Emotional Well-Being

Effect	B	SE	p	95% CI	Bootstrap
Path a : Emotional Support $\rightarrow$ Socio-emotional Well-being	0.540	0.085	< .001	—	
Path b : Socio-emotional Well-being $\rightarrow$ Academic Engagement	0.326	0.080	< .001	—	
Total effect (c)	0.343	0.072	< .001	—	
Direct effect (c')	0.168	0.080	.038	—	
Indirect effect ($a \times b$)	0.176	—	—	[0.079, 0.291]	

Note. $N = 100$. The indirect effect was estimated using 5,000 bootstrap samples.

The proportion of the total effect represented by the indirect pathway was **51.18%**.

Hypothesis Testing

The hypotheses were evaluated at $\alpha = .05$. The bivariate analyses showed statistically significant positive associations between each of the five

parental/home-context constructs and Academic Engagement. Socio-emotional Well-being was also significantly associated with Academic Engagement. The mediation hypothesis was supported by the statistically significant bootstrapped indirect effect

Table 10. Summary of Hypothesis Testing

Hypothesis	Statistical result	Decision
H1: Parental Communication is positively associated with Academic Engagement.	$q = .401$, $p < .001$	Supported
H2: Conflict Resolution is positively associated with Academic Engagement.	$q = .305$, $p = .002$	Supported
H3: Emotional Support is positively associated with Academic Engagement.	$q = .419$, $p < .001$	Supported

H4: Academic Guidance at Home is positively associated with Academic Engagement.	$\rho = .394, p < .001$	Supported
H5: Financial Capacity & Learning Conditions are positively associated with Academic Engagement.	$\rho = .217, p = .030$	Supported
H6: Socio-emotional Well-being is positively associated with Academic Engagement.	$\rho = .509, p < .001$	Supported
H7: Socio-emotional Well-being mediates the relationship between Emotional Support and Academic Engagement.	Indirect effect = 0.176; 95% CI [0.079, 0.291]	Supported

Note. Hypothesis decisions were based on $\alpha = .05$.

Discussion

Overview of the Findings

The present study examined the relationships between parental communication, conflict resolution, emotional support, academic guidance at home, financial capacity and learning conditions, socio-emotional well-being, academic engagement, and academic achievement among O/A-Level students. The study used data from 100 students and examined both direct associations and potential pathways through socio-emotional well-being. The findings demonstrated that the family and home-context variables were significantly related to students' socio-emotional experiences and academic engagement, while the relationship with academic achievement was comparatively weak.

Overall, the findings provide support for the study objectives concerning the role of parental and home-based factors in students' educational experiences. However, the regression findings indicate that the individual contribution of these variables differs when they are considered simultaneously. In particular, socio-emotional well-being emerged as the strongest independent predictor of academic engagement, while emotional support was the only significant independent predictor of socio-emotional well-being.

Parental Communication and Academic Engagement

The first major finding was a significant positive relationship between parental communication and academic engagement ($\rho = .401, p < .001$).

This finding indicates that students who reported higher levels of parental communication also tended to report higher levels of academic engagement. The finding is consistent with the broader conceptualization of parental involvement adopted in the study, in which communication is considered an important component of the family environment rather than parental involvement being limited to direct academic assistance.

The strength of the association was moderate, and parental communication also showed a strong relationship with emotional support ($\rho = .776, p < .001$). However, when the family-related variables were entered simultaneously into the regression model predicting academic engagement, parental communication did not reach the conventional significance level ($B = 0.246, p = .053$).

This distinction is important. The results demonstrate a significant bivariate association, but they do not establish parental communication as an independent predictor of academic engagement after accounting for the other variables. The finding suggests that the contribution of parental communication may overlap with other dimensions of the family environment, particularly emotional support and socio-emotional well-being.

Conflict Resolution and Academic Engagement

Conflict resolution was also positively associated with academic engagement ($\rho = .305, p = .002$). Although the relationship was weaker than those observed for parental communication, emotional

support, and socio-emotional well-being, it was statistically significant.

This finding supports the study's broader premise that the quality of family relationships is associated with students' educational experiences. Constructive management of family disagreements may form part of a home environment in which students experience greater stability and support for their educational activities. However, the regression results showed that conflict resolution was not a statistically significant independent predictor of academic engagement when the other variables were considered simultaneously. Therefore, the present findings support an association rather than an independent predictive effect.

Emotional Support and Socio-Emotional Well-Being

One of the most important findings concerned the relationship between parental emotional support and students' socio-emotional well-being. Emotional Support was the only statistically significant independent predictor of socio-emotional well-being in the multivariable regression model ($B = 0.400, p = .015$). The overall model explained 31.7% of the variance in socio-emotional well-being.

The mediation analysis further demonstrated the importance of this relationship. Emotional Support significantly predicted Socio-emotional Well-being (path a : $B = 0.540, p < .001$), while Socio-emotional Well-being significantly predicted Academic Engagement after controlling for Emotional Support (path b : $B = 0.326, p < .001$). The indirect effect was 0.176, with a 95% bootstrap confidence interval of [0.079, 0.291], which did not include zero.

The direct effect of Emotional Support on Academic Engagement also remained statistically significant ($B = 0.168, p = .038$). Approximately 51.18% of the total effect operated through socio-emotional well-being. Thus, the results indicate **partial mediation** rather than full mediation.

This finding is particularly relevant to the conceptual framework of the study because it

identifies a possible pathway linking parental emotional support with students' academic engagement. Rather than treating academic engagement as an outcome of direct academic assistance alone, the findings demonstrate that students' socio-emotional experiences form an important part of the relationship.

Academic Guidance at Home

Academic Guidance at Home demonstrated a significant positive correlation with Academic Engagement ($\rho = .394, p < .001$). It was also strongly associated with Emotional Support ($\rho = .708, p < .001$).

However, Academic Guidance at Home did not emerge as a statistically significant independent predictor of Academic Engagement in the multivariable regression model ($B = 0.131, p = .311$).

The difference between the correlation and regression findings indicates that academic guidance is related to engagement at the bivariate level, but its unique contribution becomes less evident after other dimensions of family support and socio-emotional well-being are taken into account. This finding reinforces the importance of examining parental involvement as a multidimensional construct rather than assuming that any single dimension operates independently.

Financial Capacity and Learning Conditions

Financial Capacity and Learning Conditions had the highest descriptive mean among the study constructs ($M = 4.008, SD = 0.798$). It was positively correlated with Academic Engagement ($\rho = .217, p = .030$), although this was the weakest statistically significant correlation with academic engagement among the five parental/home-context variables.

The variable did not emerge as a significant independent predictor of Academic Engagement or Academic Achievement in the multivariable regression analyses. Therefore, the findings suggest that financial and learning conditions were associated with academic engagement at the bivariate level but did not demonstrate a

statistically significant independent contribution after other factors were considered.

Socio-Emotional Well-Being and Academic Engagement

Socio-emotional well-being emerged as a central variable in the study. It was significantly correlated with Academic Engagement ($\rho = .509$, $p < .001$), representing one of the strongest relationships identified in the analysis.

More importantly, Socio-emotional Well-being was the only statistically significant independent predictor of Academic Engagement in the multivariable regression model ($B = 0.325$, $p < .001$). The overall model explained 35.3% of the variance in academic engagement.

This finding gives particular importance to students' emotional and psychological experiences within the study framework. The results indicate that academic engagement was more clearly associated with socio-emotional well-being than with the individual parental/home-context variables when all predictors were considered simultaneously.

The finding also complements the mediation analysis, in which socio-emotional well-being formed the pathway through which part of the association between emotional support and academic engagement operated. Taken together, these results position socio-emotional well-being as a central component linking the family environment with students' engagement in academic activities.

Academic Achievement

In contrast to the findings for academic engagement, the regression model predicting academic achievement was not statistically significant, $F(7, 82) = 0.740$, $p = .639$. The model explained only 5.9% of the variance in academic achievement ($R^2 = .059$), and none of the seven predictors reached the .05 significance level.

The results of this study suggest that the variables studied are more strongly linked to students' academic participation and socio-emotional experiences than their academic performance. The present model did not include other factors

that could affect academic achievement; the cross-sectional design does not enable causal inferences to be drawn.

So the difference between engagement and achievement is a salient study result. This does not imply that such increased engagement in learning activities would necessarily lead to improvements in the reported overall academic outcomes within this sample.

Theoretical Implications

The results help to conceptualize parental involvement as a multidimensional construct. Results provide evidence that parental communication, conflict resolution, emotional support, academic guidance, and financial and learning conditions are not mutually exclusive and are interrelated. All major constructs were found to be significantly correlated to one another.

There is a high level of overlap between the different types of parental support, as there is a high correlation between Parental Communication and Emotional Support ($\rho = .776$) and between Emotional Support and Academic Guidance at Home ($\rho = .708$). The findings thus help to expand the picture of emotional, relational and academic aspects, which are all part of the family environment.

The mediation finding is thus another theoretical contribution by highlighting the possibility of socio-emotional well-being as a mechanism through which emotional support might be linked with academic engagement. However, caution should be used in interpreting this statistical mediation as evidence of a causal pathway, due to the study design being a cross-sectional design.

Practical Implications

The results have implications for educational practice, especially for schools, parents, and school.

Firstly, schools could see parental involvement as more than academic monitoring or homework support. The student's educational environment can include communication, emotional support,

constructive conflict resolution, and supportive learning conditions.

Secondly, the emotional and social factors that emerged as significant predictors of academic engagement indicate that schools might want to further enhance their approach to supporting students by focusing on socio-emotional experiences in addition to academic stresses and requirements.

Third, parent-centered programs might include support for communication and emotional encouragement, as well as academic achievement. The mediation results showed that emotional support was directly related to academic engagement, as well as indirectly via socio-emotional well-being.

Policy Implications

The results at the policy level support the integration of family engagement and socio-emotional health of the student into broader educational support policies. Structured opportunities for communication between school and parents, and encouraging parents to be aware of children's emotional needs in addition to academic needs may be considered through school policies and parent-engagement programs.

The conclusions should not, however, form the basis for policy since the study was of a cross sectional sample of 100 students. The findings would be more generalizable if they were drawn from larger and more varied samples.

Limitations of the Study

Several limitations should be considered when interpreting the findings.

1. **Cross-sectional design:** Data were collected at one point in time. Consequently, the relationships identified in the study cannot establish causal or temporal relationships among parental factors, socio-emotional well-being, academic engagement, and academic achievement. This limitation is particularly relevant to the mediation analysis, which should be interpreted as

a statistically supported indirect association rather than causal mediation.

2. **Sample size:** The study included 100 student respondents. Although this provided sufficient observations for the analyses conducted, the relatively limited sample size may restrict the generalizability of the findings to wider student populations.
3. **Self-reported data:** The study was based on the student's answers to questionnaires. As a result, the measures are not directly observed measures of parental behavior and engagement but rather, they reflect students' perceptions of parental relationships, socio-emotional well-being, and academic engagement.
4. **Academic achievement data:** Ten respondents selected "Not Sure" when reporting their overall academic result. Therefore, analyses involving academic achievement were based on 90 valid observations rather than the full sample of 100.
5. **Limited explanatory power for academic achievement:** The academic-achievement regression model explained only 5.9% of the variance and was not statistically significant. This indicates that the variables included in the present study do not provide a comprehensive explanation of variation in reported academic achievement.
6. **Potential overlap among constructs:** Despite the lack of severe multicollinearity in the multicollinearity diagnostics, some constructs had fairly strong correlation values, specifically Parental Communication with Emotional Support and Emotional Support with Academic Guidance at Home. When examining the unique effect of each predictor, this overlap should be taken into account.

Conclusion

This study aimed to investigate the correlation among parental communication, conflict resolution, emotional support, academic guidance at home, financial capacity and learning conditions, socio-emotional well-being, academic engagement, and academic achievement in O/A-Level students. The study investigated 100 students and showed that various aspects of the home environment were significantly related to students' academic involvement. Parental Communication, Conflict Resolution, Emotional Support, Academic Guidance at Home and Financial Capacity and Learning Conditions were all positive correlations with Academic Engagement in particular. Socio-emotional Well-being had the highest bivariate correlation with Academic Engagement, and was the strongest independent predictor of Academic Engagement in the multivariable regression model.

One major result that was found was the importance of Emotional Support for students' Socio-emotional Well-being. Emotional Support was the only independent predictor of Socio-emotional Well-being that was statistically significant in the regression model. In addition, the mediation analysis showed that the relationship between Emotional Support and Academic Engagement was statistically significant mediated by Socio-emotional Well-being. The indirect effect was 0.176 (95% bootstrap CI [0.079, 0.291]) and around 51.18% of the total effect occurred through the mediator.

This was not the case for Academic Achievement, however, as the predictors in this study were not significant in explaining Academic Achievement. The academic-achievement regression model was not significant and accounted for 5.9% of the variance. The results in the present study suggest that the factors presented in this study were more strongly associated with students' academic engagement and socio-emotional functioning than with their self-reported academic performance.

Recommendations

From the results, the following recommendations are made. Schools should facilitate effective communication between parents and students,

and allow parents to know about the emotional and learning needs of students. In addition to academic monitoring, parent-engagement programs should provide encouragement, emotional support, respectful communication, and positive handling of family conflicts.

In addition, schools might want to increase student-support activities which foster socio-emotional well being. Educational support programs should consider students' socio-emotional experiences as a crucial element of their academic engagement, given its significant association with and predictive power of academic engagement.

It is important that parents can be encouraged to offer emotional support during periods of academic stress, that students are encouraged to make efforts, not just for their current grade, but for their own personal grade, and that students are encouraged to express concerns with their schoolwork in a comfortable setting. These strategies can help foster students' socio-emotional health and therefore, their learning engagement.

Future Research

Future research should look at these associations with larger and more varied samples within diverse schools, educational levels and socioeconomic backgrounds. Longitudinal research would also be useful, as it would be able to determine temporal relationships between parental support, socio-emotional well-being, academic engagement, and academic achievement.

Objective academic achievement data could also be included in future studies, in addition to self-report of achievement. Qualitative interviews with students, parents and teachers might be useful to supplement the quantitative results to gain a deeper understanding of the experiences of communication, emotional support, conflict resolution and academic guidance in the context of various family structures.

Lastly, future research should explore the pathway from Emotional Support to Socio-emotional Well-being to Academic Engagement

in greater depth, in a longitudinal or mixed methods study. This research may help clarify whether the mediation effect that was found in the present study is a stable developmental

trajectory across time. The cross-sectional design of the current study should be noted, as mediation results should be considered as an indirect association, not causal.

REFERENCES

- Amato, P. R., & Booth, A. (1997). *A generation at risk: Growing up in an era of family upheaval*. Harvard University Press. <https://doi.org/10.4159/9780674020191>
- Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husen & T. N. Postlethwaite (Eds.), *International encyclopedia of education* (2nd ed., Vol. 3, pp. 1643–1647). Pergamon Press/Elsevier Science.
- Cummings, E. M., & Davies, P. T. (2002). Effects of marital conflict on children: Recent advances and emerging themes in process-oriented research. *Journal of Child Psychology and Psychiatry*, 43(1), 31–63. <https://doi.org/10.1111/1469-7610.00003>
- Conger, R. D., Ge, X., & Elder, G. H., Jr. (2010). Financial strain and adolescent adjustment. *Journal of Adolescent Research*.
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, 113(3), 487–496. <https://doi.org/10.1037/0033-2909.113.3.487>
- Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology*, 19(2), 294–304. <https://doi.org/10.1037/0893-3200.19.2.294>
- Duncan, G. J., & Brooks-Gunn, J. (Eds.). (1997). *Consequences of growing up poor*. Russell Sage Foundation.
- Epstein, J. L. (2011). *School, family, and community partnerships: Preparing educators and improving schools* (2nd ed.). Routledge.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1–22. <https://doi.org/10.1023/A:1009048817385>
- Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, 81(2), 143–154. <https://doi.org/10.1037/0022-0663.81.2.143>
- Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development*, 65(1), 237–252. <https://doi.org/10.1111/j.1467-8624.1994.tb00747.x>
- Green, C. L., Walker, J. M. T., Hoover-Dempsey, K. V., & Sandler, H. M. (2007). Parents' motivations for involvement in children's education: An empirical test of a theoretical model of parental involvement. *Journal of Educational Psychology*, 99(3), 532–544. <https://doi.org/10.1037/0022-0663.99.3.532>
- Grych, J. H., & Fincham, F. D. (Eds.). (2001). *Interparental conflict and child development: Theory, research, and applications*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511527838>
- Harold, G. T., & Conger, R. D. (1997). Marital conflict and adolescent distress: The role of adolescent awareness. *Child Development*, 68, 333–350.
- Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, 45(3), 740–763. <https://doi.org/10.1037/a0015362>
- Jeynes, W. H. (2005). Parental involvement and student achievement: A meta-analysis. *Harvard Family Research Project*.

- Laursen, B., & Collins, W. A. (2009). Parent–adolescent relationships during adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology: Contextual influences on adolescent development* (3rd ed., Vol. 2, pp. 3–42). Wiley. <https://doi.org/10.1002/9780470479193.adlpsy002002>
- Lareau, A. (2003). *Unequal childhoods: Class, race, and family life*. University of California Press.
- Parker, J. G., & Gottman, J. M. (1989). Social and emotional development in a relational context. In T. J. Berndt & G. W. Ladd (Eds.), *Peer relationships in child development*. Wiley.
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417–453. <https://doi.org/10.3102/00346543075003417>
- Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development*, 63(5), 1266–1281. <https://doi.org/10.1111/j.1467-8624.1992.tb01694.x>
- Yamamoto, Y., & Holloway, S. D. (2010). Parental expectations and children's academic performance in sociocultural context. *Educational Psychology Review*, 22(3), 189–214. <https://doi.org/10.1007/s10648-010-9121-z>
- Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.). (2004). *Building academic success on social and emotional learning: What does the research say?* Teachers College Press.

Acknowledgement

None

Author Declaration

The author reported no potential conflict of interest

Funding

None