

Parenting Styles as Predictors of the Educational Achievement of Secondary Level Students: An Empirical Investigation

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ABSTRACT

The family constitutes the first and most sustained learning environment in a child's life, and the manner in which parents combine warmth, control and communication continues to shape academic outcomes throughout adolescence. The present study examined the influence of four parenting styles, namely authoritative, authoritarian, permissive and neglectful, on the educational achievement of secondary level students. A descriptive survey design was adopted and data were collected from a sample of 350 students studying in Classes IX to XII, selected through stratified random sampling from government and private secondary schools. Parenting styles were measured using a standardised four-dimensional parenting style scale, while educational achievement was operationalised as an index derived from students' aggregate marks in the preceding annual examination. Data were analysed using descriptive statistics, Pearson product-moment correlation, one-way analysis of variance with Tukey post-hoc comparisons, independent samples t-test and multiple regression analysis. The results revealed a significant positive correlation between authoritative parenting and educational achievement and significant negative correlations for the remaining three styles. One-way ANOVA indicated a statistically significant difference in achievement across the four parenting style groups, and post-hoc analysis established that authoritative parenting differed significantly from every other style. Multiple regression analysis produced a multiple correlation coefficient of 0.794, with the four parenting style variables jointly accounting for

63.1 per cent of the variance in educational achievement. Authoritative parenting emerged as the strongest positive predictor, while neglectful parenting emerged as the strongest negative predictor. No significant difference was observed between male and female students. The findings underline the decisive contribution of parental warmth, structure and involvement to adolescent academic success and carry direct implications for parent education programmes, school counselling services and home-school partnership policy.

Keywords: parenting styles, authoritative parenting, educational achievement, secondary level students, adolescence, regression analysis

I INTRODUCTION

1.1 The Family as the Primary Educational Environment

Education is not confined to the formal transactions of the classroom. Long before a child encounters a teacher, the family has already begun to transmit language, habits of attention, attitudes towards effort and beliefs about what is worth knowing. This informal curriculum continues to operate throughout the school years and often determines whether the formal curriculum takes root. Parents regulate the physical and temporal conditions of study, model attitudes towards persistence and failure, supply or withhold emotional security, and communicate expectations that adolescents internalise as their own academic standards.

The construct that captures this influence most economically is parenting style, understood as the relatively stable emotional climate and pattern of authority within which specific parenting practices occur. The distinction between style and practice is

important. Helping with homework is a practice; whether that help is experienced as encouraging companionship or as intrusive surveillance depends on the style within which it is embedded. It is precisely for this reason that studies focusing only on the frequency of parental academic involvement have produced inconsistent results, whereas studies that model the underlying emotional and authority climate have yielded more coherent findings (Boonk et al., 2018).

The classification adopted in the present study follows the two-dimensional framework in which parenting is described in terms of responsiveness, comprising warmth, acceptance and sensitivity, and demandingness, comprising supervision, structure and maturity expectations. The crossing of these dimensions yields four configurations. Authoritative parents are high on both dimensions and combine affection with reasoned and consistently applied expectations. Authoritarian parents are high on demandingness but low on responsiveness, emphasising obedience and directive control. Permissive parents are warm but impose few consistent demands. Neglectful parents are low on both dimensions and are largely disengaged from the adolescent's daily life.

1.2 Educational Achievement at the Secondary Stage

Educational achievement refers to the extent to which a learner attains the stated objectives of a course of study, and is conventionally indexed by marks obtained in school or board examinations, grade point averages or standardised achievement measures. At the secondary stage this indicator acquires particular weight because performance at this level increasingly governs access to streams of higher study, competitive examinations and eventual occupational placement. Achievement gaps that opened quietly in the primary years tend to widen and harden during secondary schooling, and remediation becomes progressively more difficult as content grows cumulative and assessment grows selective.

The secondary stage also coincides with the developmental transitions of adolescence. Learners at this stage are negotiating autonomy, reorganising their social reference from family towards peers, and forming an academic self-concept that will guide subsequent effort. Parenting behaviours that were experienced as protective in childhood may be experienced as intrusive in adolescence, and the same degree of supervision may support one learner and alienate another depending on how it is interpreted. Research has shown that the granting of behavioural autonomy and the perceived legitimacy of parental authority mediate the relationship between parenting and adolescent adjustment, indicating that adolescents' interpretation of parental behaviour, rather than its objective frequency, is the operative variable (Bi et al., 2018).

Educational achievement at this stage is, of course, multiply determined. Prior attainment, cognitive ability, school quality, teacher effectiveness, peer norms and socio-economic circumstances all contribute. Parenting style is therefore best conceptualised as one significant component within a larger explanatory system, and the present study reports effect magnitudes as well as significance levels so that its contribution can be judged in proportion.

1.3 Theoretical Perspectives Linking Parenting to Achievement

Several theoretical traditions converge in explaining why parenting style should matter for academic outcomes. Self-determination theory proposes that motivation is optimised when the psychological needs for autonomy, competence and relatedness are satisfied. Authoritative parenting, by combining warmth with structure and support for independent decision making, is theorised to satisfy all three needs and thereby foster autonomous rather than controlled forms of academic motivation. Evidence from adolescents in a South African setting has supported this pathway, showing that parenting styles influenced

life goals and aspirations through the satisfaction of psychological needs (Roman et al., 2015).

Social cognitive theory contributes the proposition that parents shape achievement by modelling effort attributions, providing mastery experiences and supplying the verbal persuasion from which academic self-efficacy is built. This mechanism has been demonstrated empirically, with self-efficacy mediating the relationship between parenting style and academic performance in adolescent samples (Masud et al., 2016; Hayek et al., 2022). Attachment theory adds that a secure emotional base enables intellectual risk-taking and persistence in the face of academic difficulty, while ecological systems theory locates the family as a microsystem whose influence is filtered through school, community and cultural belief systems, thereby anticipating the cultural variability documented in comparative research (Pinquart & Kauser, 2018).

1.4 Context and Rationale of the Present Study

Although the international literature on parenting and achievement is substantial, several considerations justify fresh empirical investigation at the secondary level. First, the majority of frequently cited studies were conducted in Western individualist settings, and there is continuing debate about whether their conclusions transfer to collectivist family systems in which hierarchical respect and extended-family involvement are normative (Sahithya et al., 2019). Second, much of the available evidence is bivariate, reporting simple associations between a single parenting style and achievement without modelling the four styles simultaneously, so the relative contribution of each style remains unclear. Third, the rapid expansion of secondary enrolment has brought into schools large cohorts of first-generation learners whose progress depends heavily on home support, making the identification of academically protective parenting patterns a matter of practical urgency.

Contemporary conditions add further reasons for enquiry. Dual-earner households, migration for employment, saturation of the adolescent

environment by digital media and the residual effects of prolonged periods of home-based learning have all reconfigured routine parent-adolescent interaction. Whether the classical typology retains its predictive power under these altered conditions is an open empirical question. The present study accordingly examines the simultaneous influence of all four parenting styles on the educational achievement of secondary level students, estimates the proportion of achievement variance attributable to parenting, and tests whether achievement differs by student gender.

II LITERATURE REVIEW

2.1 Authoritative Parenting and Academic Outcomes

The most consistently reported finding in the recent literature is a positive association between authoritative parenting and academic achievement. The most authoritative evidence is meta-analytic. Pinquart (2016) synthesised a large body of studies on children and adolescents and reported small but robust positive associations between achievement and parental warmth, behavioural control and autonomy support, together with negative associations for harsh control and psychological control. The modest magnitude of these associations is an important corrective to overstated claims, but their consistency across samples and outcome measures is notable.

Systematic review evidence converges with this conclusion. Masud, Thurasamy and Ahmad (2015) reviewed studies of parenting styles and the academic achievement of young adolescents and found the authoritative style most frequently associated with superior outcomes, while noting considerable heterogeneity in measurement. Single-country studies reinforce the pattern. Hayek et al. (2022) found among Lebanese adolescents that authoritative parenting predicted achievement partly through academic self-efficacy and intention to obtain good grades, while Zahedani et al. (2016) reported in an Iranian sample that authoritative parenting was linked both to stronger achievement and to clearer career direction. Fuentes et al. (2019)

identified a plausible mechanism, showing that adolescents from warm parenting environments displayed stronger self-regulated learning and lower academic stress, and Lavric and Naterer (2020) reported favourable psychosocial outcomes associated with authoritative exposure across several national contexts.

2.2 Authoritarian, Permissive and Neglectful Parenting

Evidence on the non-authoritative styles is less uniform. The neglectful configuration is the least contested: low warmth combined with low supervision is associated with the poorest academic profile in virtually every study. Garcia et al. (2019), examining adolescents in Spain, the United States, Germany and Brazil, found neglectful parenting associated with the least favourable outcomes in every national sample, making this one of the few cross-culturally invariant findings in the field. Sarwar (2016) reached a comparable conclusion regarding classroom conduct, observing that disengaged parenting was associated with the weakest self-discipline and the most disruptive behaviour.

Authoritarian parenting presents a more complex picture. In Western samples it is typically associated with lower achievement, lower academic self-esteem and higher anxiety, the explanation being that coercion combined with low warmth impedes the internalisation of academic values and generates performance anxiety. However, Pinquart and Kauser (2018) demonstrated meta-analytically that the strength of this negative association varies by cultural group, being attenuated where firm parental direction carries different normative meaning. Sahithya et al. (2019) similarly observed that directive parenting is normatively embedded in Indian family systems and is not necessarily perceived by adolescents as rejecting.

The permissive style has generated the sharpest disagreement. Several Southern European and Latin American studies report that indulgent parenting produces outcomes equal or superior to

authoritative parenting on measures of self-esteem and psychosocial adjustment, prompting the argument that the authoritative optimum is culturally specific (Garcia et al., 2019). Osorio and Gonzalez-Camara (2016), however, tested this claim directly in a Spanish adolescent sample and found the alleged superiority unsupported once outcome domains were disaggregated, with advantages appearing for some psychosocial indicators but not for achievement-related ones. Part of the inconsistency in this literature is likely to be a measurement artefact, since instruments frequently conflate behavioural monitoring with psychological intrusion despite the two being related to achievement in opposite directions (Gonzalez-Camara et al., 2019).

2.3 Mechanisms, Moderators and Research Gaps

Recent work has shifted from documenting direct associations to modelling the processes through which parenting influences achievement. Academic self-efficacy, goal orientation, self-regulated learning and homework behaviour have all been identified as mediators. Chen (2015) found that the relationship between perceived parenting style and achievement among Hong Kong secondary students operated through goal orientations, with authoritative parenting predicting mastery goals and controlling styles predicting avoidance goals. Nunez et al. (2015) showed that the quality of parental involvement in homework, particularly support for autonomy rather than direct control, predicted homework behaviours and thereby achievement. Wang and Sheikh-Khalil (2014) demonstrated longitudinally that involvement communicating educational expectations benefited both achievement and mental health, whereas involvement expressed through direct supervision of schoolwork was less effective.

Moderators identified in the literature include cultural background, adolescent age and parent gender. Yaffe (2020) documented systematic differences between maternal and paternal styles, implying that designs relying on a single parental

informant may obscure meaningful variation. Despite this accumulating body of work, three gaps remain. Few studies model all four parenting styles simultaneously in a single regression framework, so the relative predictive weight of each style is rarely established. Evidence from South Asian secondary school populations remains comparatively thin. And relatively few studies report the proportion of achievement variance explained, making it difficult to judge the practical importance of parenting relative to other determinants. The present study addresses these gaps directly.

III RESEARCH METHODOLOGY

3.1 Research Design, Population and Sample

The study adopted a quantitative, non-experimental descriptive survey design with a correlational and predictive orientation. This design was considered appropriate because the independent variables, namely the four parenting styles, occur naturally within families and cannot be experimentally manipulated on either ethical or practical grounds. The population comprised students enrolled in Classes IX to XII in government and private secondary and senior secondary schools within the selected district.

A sample of 350 students was drawn using stratified random sampling, with stratification applied on the basis of school management type, locality and class level in order to ensure proportionate representation of the population's principal segments. Schools were first selected randomly within each stratum, after which intact sections were approached and students within them selected randomly. The sample size satisfies the conventional requirement of a minimum of twenty observations per predictor for multiple regression analysis, the four-predictor model in the present study requiring a minimum of eighty cases. Participation was voluntary, informed consent was obtained from school authorities and parents, assent was obtained from students, and anonymity and confidentiality were assured throughout. Table

1 presents the demographic profile of the respondents.

Table 1: Demographic Profile of the Respondents (N = 350)

Variable	Category	Frequency	Percentage
Gender	Male	186	53.1
	Female	164	46.9
Class level	Class IX	92	26.3
	Class X	96	27.4
	Class XI	84	24.0
	Class XII	78	22.3
Locality	Urban	198	56.6
	Rural	152	43.4
Type of school	Government	164	46.9
	Private	186	53.1
Family type	Nuclear	214	61.1
	Joint	136	38.9
Parental education	Up to secondary	118	33.7
	Higher secondary	96	27.4
	Graduate	92	26.3
	Postgraduate and above	44	12.6
Monthly family income	Below 20,000	104	29.7
	20,000 to 40,000	128	36.6
	Above 40,000	118	33.7

3.2 Instrumentation and Data Collection

Two instruments were employed. Parenting style was measured using a four-dimensional parenting style scale comprising forty-four items distributed across the authoritative, authoritarian, permissive and neglectful subscales. Each item was rated on a five-point Likert format ranging from strongly

disagree to strongly agree, with adolescents reporting on the parenting they perceived themselves to receive. The instrument yields a separate continuous score for each of the four styles, permitting the simultaneous entry of all four dimensions into a regression model, and additionally permits the assignment of each respondent to a dominant style category on the basis of the highest subscale score.

Educational achievement was operationalised through an Educational Achievement Index constructed from each student's aggregate percentage of marks in the preceding annual or half-yearly examination as recorded in official school registers, converted to a five-point index so as to be commensurable with the predictor scales. The use of institutional records rather than self-reported marks eliminates a common source of measurement error in this field.

The reliability of the instrument was established through internal consistency analysis. Cronbach's alpha coefficients ranged from 0.812 to 0.871 across the four subscales, all exceeding the accepted threshold of 0.70. Content validity was verified by a panel of five experts in educational psychology and education, and a pilot study was conducted on forty students not included in the final sample. The distributional properties of all variables were examined before analysis, and skewness and kurtosis values fell within the acceptable range of plus or minus one, supporting the assumption of approximate normality required for parametric testing. Table 2 presents the descriptive statistics and reliability coefficients.

Table 2: Descriptive Statistics and Reliability Coefficients of the Study Variables (N = 350)

Variable	Items	Mean	SD	Skewness	Kurtosis	Alpha
Authoritative Parenting	12	3.68	0.71	-0.42	0.18	0.871

Authoritarian Parenting	12	2.96	0.72	0.21	-0.31	0.843
Permissive Parenting	10	2.84	0.72	0.34	-0.22	0.812
Neglectful Parenting	10	2.51	0.74	0.47	0.09	0.826
Educational Achievement Index	-	3.50	0.63	-0.19	-0.24	-

3.3 Hypotheses and Statistical Techniques

Six null and alternative hypotheses were formulated to guide the analysis. H1 proposed that there is a significant relationship between parenting styles and the educational achievement of secondary level students. H2 proposed that there is a significant difference in educational achievement among students belonging to different dominant parenting style groups. H3 proposed that authoritative parenting has a significant positive influence on educational achievement. H4 proposed that authoritarian parenting has a significant influence on educational achievement. H5 proposed that permissive and neglectful parenting styles are negatively associated with educational achievement. H6 proposed that there is a significant difference in the educational achievement of male and female secondary level students.

Data were analysed using statistical software at the 0.05 level of significance. Descriptive statistics were computed to summarise the distribution of all variables. Pearson product-moment correlation was employed to test H1. One-way analysis of variance followed by Tukey's honestly significant difference

test was employed to test H2 and to identify which specific group differences accounted for the overall effect. An independent samples t-test was employed to test H6. Multiple regression analysis using the simultaneous entry method was employed to test H3, H4 and H5, with the four parenting style scores entered as independent variables and the Educational Achievement Index as the dependent variable. Before interpreting the regression model, its assumptions were verified: tolerance values exceeded 0.80 and variance inflation factors remained below 1.30 for all predictors, indicating no problematic multicollinearity; the Durbin-Watson statistic of 1.94 indicated independence of residuals; and inspection of residual plots confirmed linearity and homoscedasticity.

IV RESULTS

The results are presented in the sequence of the hypotheses. Table 3 first reports the distribution of respondents across dominant parenting style categories together with the mean achievement recorded within each group, providing the descriptive foundation for the inferential analyses that follow.

Table 3: Distribution of Respondents by Dominant Parenting Style and Mean Educational Achievement

Dominant Parenting Style	N	Percentage	Mean Achievement	SD
Authoritative	142	40.6	3.97	0.52
Authoritarian	112	32.0	3.31	0.48
Permissive	52	14.9	3.22	0.46
Neglectful	44	12.6	2.80	0.44
Total	350	100.0	3.50	0.63

The distribution indicates that the authoritative style was the most commonly reported, characterising 40.6 per cent of the sample, followed by the authoritarian style at 32.0 per cent. The permissive and neglectful styles were comparatively less frequent. The pattern of group means already suggests a graded relationship, with achievement highest in the authoritative group and progressively lower across the authoritarian, permissive and neglectful groups.

4.1 Testing of H1: Correlation Between Parenting Styles and Achievement

Pearson product-moment correlation was computed to examine the relationship between each parenting style and educational achievement. The results are presented in Table 4.

Table 4: Pearson Correlation Matrix of Parenting Styles and Educational Achievement (N = 350)

Variable	1	2	3	4	5
1. Authoritative Parenting	1.00				
2. Authoritarian Parenting	-.08	1.00			
3. Permissive Parenting	-.07	0.18	1.00		
4. Neglectful Parenting	-.07	0.30	0.23	1.00	
5. Educational Achievement	0.59	-.32	-.36	-.51	1.00

Authoritative parenting exhibited a substantial positive correlation with educational achievement ($r = 0.59$, $p < 0.01$), indicating that students who perceived their parents as warm, communicative and consistently structured tended to record higher marks. All three remaining styles were negatively correlated with achievement. The strongest negative relationship was observed for neglectful

parenting ($r = -0.51$, $p < 0.01$), followed by permissive parenting ($r = -0.36$, $p < 0.01$) and authoritarian parenting ($r = -0.32$, $p < 0.01$). Since all four coefficients exceeded the critical value and were statistically significant, H1 is accepted. The relatively low inter-correlations among the four predictors, ranging from -0.08 to 0.30, further confirm that the subscales measure reasonably distinct constructs.

4.2 Testing of H2: Group Differences in Educational Achievement

One-way analysis of variance was conducted to determine whether educational achievement differed significantly across the four dominant parenting style groups. The results appear in Table 5.

Table 5: One-Way ANOVA of Educational Achievement Across Parenting Style Groups

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	61.048	3	20.349	90.472	0.000
Within Groups	77.823	346	0.225		
Total	138.871	349			

Note. Significant at the 0.05 level.

The analysis produced an F-value of 90.472 with an associated significance value of 0.000. Since the obtained probability is well below the 0.05 threshold, the null hypothesis of equality of group means is rejected and H2 is accepted. Educational achievement therefore differs significantly across the four parenting style groups. Because the F-test establishes only that a difference exists somewhere among the groups, Tukey's honestly significant difference test was applied to identify the specific pairs responsible for the effect. The post-hoc results are reported in Table 6.

Table 6: Tukey HSD Post-Hoc Comparisons of Educational Achievement by Parenting Style

Comparison	Mean Difference	Std. Error	Sig.	Interpretation
Authoritative vs Authoritarian	0.66	0.060	0.000	Significant difference
Authoritative vs Permissive	0.75	0.077	0.000	Significant difference
Authoritative vs Neglectful	1.17	0.082	0.000	Significant difference
Authoritarian vs Permissive	0.09	0.080	0.712	No significant difference
Authoritarian vs Neglectful	0.51	0.084	0.000	Significant difference
Permissive vs Neglectful	0.42	0.097	0.001	Significant difference

Note. Decision rule: comparisons with probability values below 0.05 are treated as statistically significant.

The post-hoc analysis shows that the authoritative group differed significantly from every other group, and in each case in the favourable direction. The largest single difference was between the authoritative and neglectful groups, where the mean achievement gap of 1.17 index points represents a substantial educational disadvantage. The comparison between the authoritarian and permissive groups was the only one that failed to attain significance, indicating that although these two styles differ markedly in their behavioural expression, one being highly controlling and the other highly permissive, they are associated with broadly comparable academic outcomes. Both the permissive and the authoritarian groups nevertheless outperformed the neglectful group significantly, confirming that the complete absence

of parental engagement is associated with the poorest academic position.

4.3 Testing of H6: Gender Differences in Educational Achievement

An independent samples t-test was conducted to examine whether male and female students differed significantly in educational achievement. Table 7 presents the results.

Table 7: Independent Samples t-Test of Educational Achievement by Gender

Gender	N	SD	t	df	Sig.	Result
Male	186	0.64	1.789	348	0.074	Not significant
Female	164	0.61				

Female students recorded a marginally higher mean achievement than male students, but the obtained t-value of 1.789 with 348 degrees of freedom yielded a probability of 0.074, which exceeds the 0.05 criterion. The difference is therefore not statistically significant and H6 is rejected. This finding indicates that the influence of parenting on educational achievement operates comparably for boys and girls in the present sample.

4.4 Testing of H3, H4 and H5: Regression Analysis

Multiple regression analysis was conducted to examine the combined and independent influence of the four parenting styles on educational achievement. Regression analysis determines the extent to which a set of independent variables predicts variation in a dependent variable and permits the relative contribution of each predictor to be estimated while holding the others constant. The four parenting style scores were entered simultaneously as independent variables and the Educational Achievement Index served as the dependent variable. The model summary is presented in Table 8.

Table 8: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Durbin-Watson
1	0.794	0.631	0.627	0.382	1.940

Note. Predictors: authoritative, authoritarian, permissive and neglectful parenting. Dependent variable: Educational Achievement Index.

The model produced a multiple correlation coefficient of 0.794, indicating a strong joint association between the set of parenting style variables and educational achievement. The coefficient of determination of 0.631 shows that 63.1 per cent of the variance in educational achievement is explained by the four parenting styles taken together. The adjusted value of 0.627, which corrects for the number of predictors and the sample size, remains close to the unadjusted figure, confirming that the explanatory strength of the model is not an artefact of overfitting. The Durbin-Watson statistic of 1.940 lies close to the ideal value of 2.0, indicating independence of residuals. The overall significance of the model was tested through analysis of variance, reported in Table 9.

Table 9: ANOVA of the Regression Model

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	87.642	4	21.911	147.582	0.000
Residual	51.229	345	0.148		
Total	138.871	349			

Note. Significant at the 0.05 level.

The obtained F-value of 147.582 with a significance value of 0.000 confirms that the regression model as a whole is statistically

significant. The set of parenting style variables therefore collectively contributes to explaining variation in educational achievement among secondary level students, and the observed relationship cannot reasonably be attributed to sampling error. The individual contribution of each predictor is presented in Table 10.

Table 10: Regression Coefficients for the Prediction of Educational Achievement

Predictor Variable	B	Std. Error	Beta	t	Sig.
Constant	3.376	0.198	-	17.051	0.000
Authoritative Parenting	0.486	0.042	0.548	11.571	0.000
Authoritarian Parenting	-0.108	0.043	-0.124	-2.521	0.012
Permissive Parenting	-0.187	0.056	-0.213	-3.339	0.001
Neglectful Parenting	-0.324	0.048	-0.382	-6.750	0.000

Authoritative parenting recorded the highest positive standardised coefficient ($\text{Beta} = 0.548$, $t = 11.571$, $p < 0.001$), indicating that it significantly enhances educational achievement. A one unit increase in perceived authoritative parenting is associated with an increase of 0.486 units in the achievement index when the other three styles are held constant. The result suggests that supportive communication, balanced discipline and consistent parental involvement contribute positively to academic success, and H3 is accordingly accepted. Authoritarian parenting demonstrated a statistically significant negative effect ($\text{Beta} = -0.124$, $t = -2.521$, $p = 0.012$). Although the magnitude of this effect is comparatively small, the result confirms that excessive parental control and rigid

disciplinary practice adversely affect academic performance. H4 is therefore accepted.

Permissive parenting recorded a significant negative coefficient ($\text{Beta} = -0.213$, $t = -3.339$, $p = 0.001$), indicating that excessive freedom coupled with limited parental supervision depresses educational achievement. Neglectful parenting exhibited the strongest negative influence among all predictors ($\text{Beta} = -0.382$, $t = -6.750$, $p < 0.001$), showing that the absence of parental involvement, emotional support and academic monitoring substantially reduces achievement. Both components of H5 are therefore supported and the hypothesis is accepted.

Comparison of the standardised coefficients establishes a clear ordering of predictive weight. Authoritative parenting is the strongest predictor overall, followed by neglectful parenting in the negative direction, then permissive parenting and finally authoritarian parenting. It is noteworthy that neglect exerts a considerably stronger adverse influence than excessive control, suggesting that parental disengagement is academically more damaging than parental strictness. The summary of hypothesis testing is presented in Table 11.

Table 11: Summary of Hypothesis Testing

Hypothesis	Statistical Test	Result
H1: There is a significant relationship between parenting styles and the educational achievement of secondary level students.	Pearson correlation	Accepted
H2: There is a significant difference in educational achievement among students belonging to different parenting style groups.	One-way ANOVA with Tukey HSD	Accepted
H3: Authoritative parenting has a significant positive influence on educational achievement.	Multiple regression	Accepted

H4: Authoritarian parenting has a significant influence on educational achievement.	Multiple regression	Accepted
H5: Permissive and neglectful parenting styles are negatively associated with educational achievement.	Multiple regression	Accepted
H6: There is a significant difference in the educational achievement of male and female secondary level students.	Independent samples t-test	Rejected

V FINDINGS AND DISCUSSION

The first major finding is that parenting styles bear a significant and substantial relationship to the educational achievement of secondary level students, jointly accounting for 63.1 per cent of the variance in achievement. This is a considerably larger proportion than the small effect sizes reported in international meta-analytic work (Pinquart, 2016), and the discrepancy deserves comment. Two explanations are plausible. Meta-analytic estimates aggregate across studies employing heterogeneous instruments and outcome measures, which attenuates observed effects, whereas the present study used a single validated instrument and an institutionally verified achievement record. In addition, the shared-method component arising from the fact that both parenting perception and the classification of students derive from the same respondent group may inflate the association. The magnitude should therefore be interpreted as an upper-bound estimate for this sample rather than a universal parameter.

The second finding is the clear superiority of the authoritative style. Authoritative parenting was the only style positively associated with achievement, recorded the highest group mean, differed significantly from every other group in post-hoc comparison, and emerged as the strongest predictor in the regression model. This converges with the systematic review evidence of Masud et al. (2015)

and with the mediational findings of Hayek et al. (2022) and Fuentes et al. (2019). The theoretical interpretation is that the combination of warmth and structure simultaneously satisfies the adolescent's need for relatedness and for competence, producing internalised rather than merely compliant academic motivation. Firm and predictable expectations supply the routine that sustained study requires, while warmth and reasoned communication ensure that these expectations are adopted as personal standards rather than resisted as external impositions.

The third finding, and arguably the most practically significant, concerns the relative severity of neglect. Neglectful parenting produced the lowest group mean, the largest post-hoc gap from the authoritative group, and the strongest negative regression coefficient. Its adverse influence was roughly three times that of authoritarian parenting. This suggests that for the adolescents in this sample, engaged but imperfect parenting is markedly preferable to disengagement. The finding aligns with the cross-national evidence of Garcia et al. (2019), in which neglectful parenting was associated with the least favourable outcomes in every national sample examined, and with the behavioural evidence reported by Sarwar (2016).

The fourth finding is that authoritarian parenting exerted a statistically significant but comparatively modest negative influence. The small magnitude of this coefficient is itself informative. In much Western research, authoritarian parenting is associated with substantial academic disadvantage; the attenuated effect observed here is consistent with the meta-analytic demonstration that the consequences of strict control vary by cultural group (Pinquart & Kauser, 2018) and with the observation that directive parenting is normatively embedded in Indian family systems and is not necessarily interpreted by adolescents as rejection (Sahithya et al., 2019). Strictness that occurs within a relationship the adolescent regards as legitimate appears to carry a smaller academic cost than strictness experienced as arbitrary.

The fifth finding is that permissive parenting was significantly detrimental, with a negative coefficient nearly twice that of authoritarian parenting. Warmth in the absence of structure was therefore insufficient to support achievement in this sample. This result speaks directly to the continuing debate about whether the indulgent style constitutes an alternative optimum. The present data support the position of Osorio and Gonzalez-Camara (2016) rather than the indulgent-optimum thesis, at least where academic outcomes specifically are concerned, and reinforce the point that parenting configurations supporting emotional wellbeing do not necessarily support academic performance.

The sixth finding is the absence of a significant gender difference in achievement. Although female students recorded a slightly higher mean, the difference did not reach significance. This suggests that the parenting mechanisms identified operate comparably for boys and girls at this stage, and cautions against gender-differentiated parent guidance in the absence of stronger evidence.

VI CONCLUSION

The present study set out to examine the influence of parenting styles on the educational achievement of secondary level students and to establish the relative predictive weight of each style. On the basis of data from 350 students analysed through correlation, analysis of variance, post-hoc comparison, t-test and multiple regression, the study concludes that parenting style constitutes a significant determinant of academic achievement at the secondary stage. The four styles together explained 63.1 per cent of the variance in achievement, and the overall regression model was statistically significant.

Authoritative parenting emerged as the configuration most conducive to academic success. Its combination of emotional warmth, open communication, reasoned discipline and consistent involvement was associated with the highest achievement in every analysis performed, and it differed significantly from all three remaining

styles. By contrast, neglectful parenting was associated with the poorest achievement and exerted the strongest negative predictive influence, while permissive and authoritarian parenting were both significantly detrimental, though to a lesser degree. Gender was not found to differentiate achievement.

These conclusions carry several practical implications. Schools should treat parents as partners in the development of adolescents' motivational and self-regulatory capacities rather than as auxiliary instructors, and parent education programmes would be better directed towards the communication of expectations, the quality of parent-adolescent dialogue and the granting of age-appropriate autonomy than towards direct academic tutoring, which the wider literature shows to be inconsistently beneficial (Boonk et al., 2018). School counsellors should be alert to indicators of parental disengagement, which this study identifies as the single most academically damaging pattern, and should be equipped to provide compensatory relational support for students whose homes offer limited structure or warmth. Teacher education programmes would benefit from including a working knowledge of family process so that classroom teachers can interpret academic difficulty in its familial context. Certain limitations qualify these conclusions. The design is cross-sectional, so the direction of influence cannot be conclusively established; sustained academic difficulty may itself provoke changes in parental behaviour. Parenting was assessed solely through adolescent perception of a single parental figure, whereas maternal and paternal styles are known to differ systematically (Yaffe, 2020). The sample was drawn from a single district, which limits generalisability. Future research should employ longitudinal and cross-lagged designs, collect data from both parents as well as adolescents, extend the sampling frame across regions, and evaluate intervention programmes designed to shift parenting behaviour

and measure the downstream academic consequences.

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