The Mediating Role of Social Interaction Between Parenting Style and Academic Achievement Among University Students

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Abstract
The purpose of this study is to explore the impact of parenting styles in social interaction and academic achievements among university students, with a specific focus on the mediating role of social interaction. Additionally, the study examines the impact of demographic variables such as gender on these relationships. A sample of 250 students (156 females and 94 males) age group 19 to 30 was selected by random sampling method from Government College University Faisalabad. In study the Parenting Authority Questionnaire (PAQ) with 30 items to assess parenting styles and the Social Provisions Scale (SPS) with 24 items to measure social interactions are used to collect the data. Correlational analysis run to measure the relationship of parenting behavior, social interaction and academic achievements. Correlation analysis demonstrated significant relationships among various parenting styles, academic and social interaction scales. Authoritative parenting emerged as the most beneficial style positively influencing both social interaction and academic achievement. Authoritarian parenting, while showing some positive correlation with social interaction, did not demonstrate a significant positive impact on academic achievement. This suggests that while the structured and disciplined environment created by authoritarian parents may foster certain social skills, it might also create an environment that restricts creativity, critical thinking, and the intrinsic motivation needed for academic success. To see the mediating role of social interaction, run the regression analysis. Analysis suggests that while parenting style significantly predicts social interaction, social interaction does not appear to mediate the relationship of parenting style and academic performance. To measure out the gender differences, run independent samples t-test that analysis suggests both males and females have similar levels of social interaction skills and there is no significant difference in PAQ scores between males and females (t = 0.589, p = .498). This indicates that there are no significant effects of parenting styles on gender differences.
Keywords: Mediating, Interaction, Parenting

1. Introduction

There are several methods which play a crucial role in shaping a person's life. Where parenting is on the top. Society and peer groups also play a role in shaping our behavior, and the family environment affects us the most. How we behave and interact with society, how we react in different situations, how we handle stressful situations. All these behaviors are shaped in our home. How our parents deal with us, how they make us feel. This study focuses on understanding the relationship between parenting styles and their long-term effects on university students, specifically examining how different parenting approaches influence students' social skills and academic performance.

Baumrind (1966, 1967, 1971) is an innovator of research on parenting styles. She introduced a typology of three parenting styles to explain differences in parenting behaviors: the authoritarian, authoritative and permissive parenting style. In the authoritarian parenting style, parents are self-controlled and ask obedience without question. They impose regulations rigidly and provide little lovingness or open dialogue. This can make children who are compliant and skilled. While may also result in lower self-esteem, poorer social skills and higher stress level. Studies have shown that in authoritarian parenting styles their children may struggle with behavioral issues. This can include acting out, getting into trouble, or feeling withdrawn and anxious (Hoeve et al. 2008; Lamborn et al. 1991; Steinberg et al. 1994; Williams et al. 2009; Wolfradt et al. 2003).

Authoritative parents are caring, supportive, responsive and supportive, yet set clear standards and limits. They encourage open communication and self independence while maintaining firm control and guidance. Authoritative parenting style coincides with better developmental outcomes in children (Baumrind (1967, 1971, 1989, 1991); Dornbusch et al. (1987); Aunola et al. 2000; Lamborn et al. (1991); Darling and Steinberg (1993); Querido et al. (2002); Shucksmith et al. 1995; Steinberg et al. 1994; Steinberg et al. 1992).Baumrind (1971) suggested that Permissive parents are indulgent and lenient, often avoiding the enforcement of rules or standards. They are very nurturing and communicative, but provide little discipline. When parents are too lenient and don't set clear rules or boundaries, children may have trouble behaving, following directions, and doing appropriately in school. This style can lead to children who struggle with self-control and authority, and may exhibit more behavioral problems and lower academic achievement.

Maccoby and Martin (1983) well tried to span Baumrind's typology and parenting dimensions. Based on the combination of two dimensions – demandingness and responsiveness – they defined four parenting styles: authoritarian (low responsiveness and high demandingness),authoritative (high demandingness and high responsiveness), indulgent (low demandingness and high responsiveness) and neglectful (low demandingness and

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low responsiveness). On the basis of Maccoby and Martin's work. Baumrind (1989, 1991) elaborate her typology with a fourth parenting style, neglectful parenting style.

Numerous studies have established that students' social interactions and academic achievements are crucial indicators of their overall success and well-being in university. Social interactions, including the ability to form and maintain relationships, navigate social networks, and exhibit social competence, are integral to a student's university experience. Positive social interactions can enhance emotional well being, provide support systems, and facilitate academic collaboration, all of which contribute to academic success. Conversely, poor social skills can lead to isolation, stress, and academic difficulties. It has been widely studied the role of parenting behavior with respect to adult academic and social functioning (Pettit et al. 1997; Cohen & Rice, 1997).

We aimed to identify patterns and correlations between different parenting styles and students' social and academic outcomes. In particular, the aim of this study is to find out the relationship of parenting style, social interaction and academic achievement among university students. Secondly, to examine the mediatory role of social interaction on parenting style and academic achievement. And third is to observe the demographic differences on the level of parenting style, social interaction and academic performance among university students.

2. Literature Review

Turner et al. (2009) discovered that authoritative parenting, along with confidence in one's abilities and internal motivation, significantly influences academic achievement in college students, while there was no significant interaction between confidence in one's abilities and authoritative parenting. Yasmin and Kiani (2013) revealed that authoritative parenting had a positive impact correlates with students' academic performance, while authoritarian and permissive parenting styles are negatively correlated. Ishak et al. (2012) found that parenting styles, particularly the authoritative style, moderated the connection between academic one's self-concept and academic achievement, with the stronger impact observed for the authoritative style compared to the authoritarian style. Stavrulaki et al. (2021) found that motivation orientation, based on self-determination theory, partially influences the connection between authoritative parenting and life satisfaction, while a motivation mediates the connection/relationship between authoritarian parenting and life satisfaction; however, motivation types did not influence/mediating the relationship between parenting style and GPA, although specific motivations were correlated with academic performance. Gota (2012) tested an integrated model of academic achievement, revealing that authoritative parenting positively influences academic self-efficacy and achievement motivation, which in turn affect academic performance, with notable differences between male and female students in these relationships.

Khan at al. (2014) found that while self-esteem did not significantly predict academic achievement among postgraduate students, authoritarian parenting style had a significant positive impact on their academic success, whereas authoritative parenting style showed no significant relationship with academic performance. Akinsola (2011) revealed that authoritative parenting and family type significantly affect academic achievement among university students, with students from single-parent families showing higher academic performance, while parenting styles positively correlated with personality traits such as self-esteem and need for achievement. Pisacano (2016) found that authoritative parenting positively correlates with college students' GPA, while boys showed a stronger positive correlation with permissive parenting, indicating differing impacts of parenting styles by gender. Emotionally intelligent students form good interactions and tends to be less aggressive (Javaid et al., 2024). Loke and Low (2021) found a notable connection between parenting styles and psychological well-being among Malaysian university students, but no notable/significant connection between parenting styles and academic performance, contradicting previous research findings. Starr (2011) explored the relationships among parenting styles, learning autonomy, perceived parental support for autonomy, and academic achievement among undergraduate students, finding no statistically significant relationships despite some positive and negative correlations among the variables. Abar et al. (2009) explored the connections between religiosity, maternal parenting style, and academic outcomes among African-American youth at a parochial college, finding that authoritative parenting is associated with improved academic performance and study skills, while high student religiosity correlates with academic success and lower risk behaviors.

Matejevic et al. (2014) explored that the authoritative parenting style exhibited by mothers was associated with greater participation in school activities and improved academic success for adolescents, whereas the authoritarian parenting style demonstrated by fathers was related to reduced involvement. Tsela et al. (2022) found that authoritative parenting is positively correlated with children's school achievement in Greece, whereas authoritarian parenting is associated with lower achievement, with parental involvement playing a key role in influencing academic performance. Roopnarine et al. (2006) demonstrated that fathers parenting styles and involvement, particularly authoritative parenting and school contact, had a stronger impact on children's academic skills and social behaviors compared to mothers' parenting among kindergarten-age children of Caribbean immigrants. Rizka and Bacotang (2018) discovered a significant positive correlation between authoritative parenting and the social skills of preschool children, while no significant correlation was observed between authoritarian or permissive parenting and the social skills of children in Banda Aceh.

Besharat et al. (2011) found that both authoritative and authoritarian parenting styles were negatively correlated with children's academic achievement in Iranian families, while permissive parenting showed no significant impact. Borak et al. (2016) identified a strong positive correlation between authoritative parenting by both mothers and fathers and

children's academic performance, indicating that authoritative parenting enhances academic success. Mensah et al. (2013) observed that authoritative parenting was the dominant style among parents and positively influenced children's social development, promoting prosocial behavior, while authoritarian parenting led to antisocial behavior. The study recommended adopting authoritative parenting to foster social competence in children. Rivers et al. (2012) discovered that high school students who perceived their parents as authoritative demonstrated higher intrinsic motivation in academics, suggesting a positive relationship between authoritative parenting and students' motivation. Ishak et al. (2011) concluded that both authoritative and authoritarian parenting styles influenced the relationship between academic self-concept and academic achievement, with the effect being stronger under authoritative parenting, highlighting its positive influence on students' academic outcomes. Dibra et al. (2014) discovered that parenting styles, particularly authoritarian, were influenced by parents' demographic characteristics, such as lower social and economic status, while authoritative parenting was linked to higher academic achievement among elementary school students in Tirana. Dornbusch et al. (1999) found that authoritative parenting positively correlates with adolescents' school performance, whereas authoritarian and permissive styles are negatively associated, resulting in the strongest impact observed among white students and in families with consistent parenting approaches.

Zahedani et al. (2016) identified significant relationships between authoritarian parenting and both academic success and students' career paths at Shiraz University of Medical Sciences, highlighting the importance of mutual understanding and close parent-child relationships.

Carpenter (2010) found that neither parental nor student expectations and aspirations significantly predicted math achievement among Latino 12th graders from immigrant parents, although a strong connection was noted between parental aspirations and expectations and their duration of residence in the United States. Spera (2005) examined research on the relationship between parenting practices, styles, and adolescent academic achievement, emphasizing that parental involvement and monitoring are crucial predictors of success, with authoritative parenting typically associated with higher achievement. Social support improves academic achievement (Maqbool et al., 2017). High gratitude of students helps them perform well and make good social interactions (Javaid et al., 2024). Masud et al. (2016) found that while parenting styles alone did not significantly impact academic performance, self-efficacy mediated the connection between authoritative parenting and academic success among university students in Pakistan, emphasizing the significance of self-efficacy in adolescent development. Rauf and Ahmed (2017) identified that parental modelling significantly predicts filial obligation in young adults, with notable gender differences in most domains of filial obligation except self-sufficiency. If parents don't give enough attention, it can make them embittered abut university students may overcome through expressive writing (Javaid & Mahmood, 2023).

Garg et al. (2019) examined the changing size and structure of families in India, revealing an increase in nuclear households, with family jointness influenced by living standards and land ownership rather than caste. Pong et al. (2005) found that while parenting styles and social capital vary by ethnicity and immigrant generation, they do not explain the ethnic-generational differences in school performance, with family socioeconomic status being the primary factor for the achievement gap among Hispanic students. Turner et al. (2009) revealed that authoritative parenting positively influences college students' academic performance, with self-efficacy and intrinsic motivation being key predictors. Murray (2012) found that authoritative parenting is linked to better academic achievement among 9-year-old children in Ireland, with maternal education being a stronger predictor, while parental monitoring and positive self-concept mediated the role of parenting style.

Llorca et al. (2017) analyzed how authoritative and permissive parenting styles influence adolescent peer relationships, revealing that permissive parenting predicts aggression and negatively impacts peer attachment, with peer relations and self-efficacy mediating the effects on academic performance. Rivers (2008) explored the connection between parenting style and academic achievement in high school students in rural Georgia, finding that motivation mediates this relationship and recommending enhanced intrinsic motivation strategies for improved outcomes. Yasmin and Kiani (2013) aimed to identify parenting styles based on parents' perceptions and their relationship with students' academic performance, finding that authoritative parenting positively correlates with academic performance, whereas authoritarian and permissive styles have a negative impact. Masud et al. (2015) highlighted the significant impact of parenting styles on young adolescents' behavior and academic performance, confirming that authoritative parenting is the most effective and calling for more cross-cultural research. Akinsola (2011) investigated the connections between parenting styles, family types, personality traits, and academic achievement, revealing that authoritative parenting and single-parent families were associated with higher academic performance.

Leung et al. (1998) compared parenting styles and academic achievement across cultures, finding that authoritarianism negatively impacted academic success, while authoritativeness was positively correlated only in English-speaking groups. Deslandes et al. (1997) analysed the effect of parenting style on academic achievement, finding that parental acceptance, supervision, and support significantly contribute to school performance, while parent-teacher contact was linked to lower grades. Huang and Gove (2015) analyzed Amy Chua's strict parenting style, classifying it as an Ethnic Minority subset of Authoritarian parenting and examining its relationship with academic performance through Western literature and Confucian values. On the basis of the aforementioned context, we have formulated the following hypothesis for this study:

Hypothesis 1: There would be a significant relationship of parenting style, academic achievement and Social interaction among university students.

Hypothesis 2: There would be a significant mediating role of social interaction between Parenting style and academic achievement among university students.

Hypothesis 3: There would be significant demographic differences on the role of parental style, social interaction and academic achievement among university students.

Social Interaction
(Mediator)

Parenting Style
(Independent Variable)

Academic Achievement
(Dependent Variable)
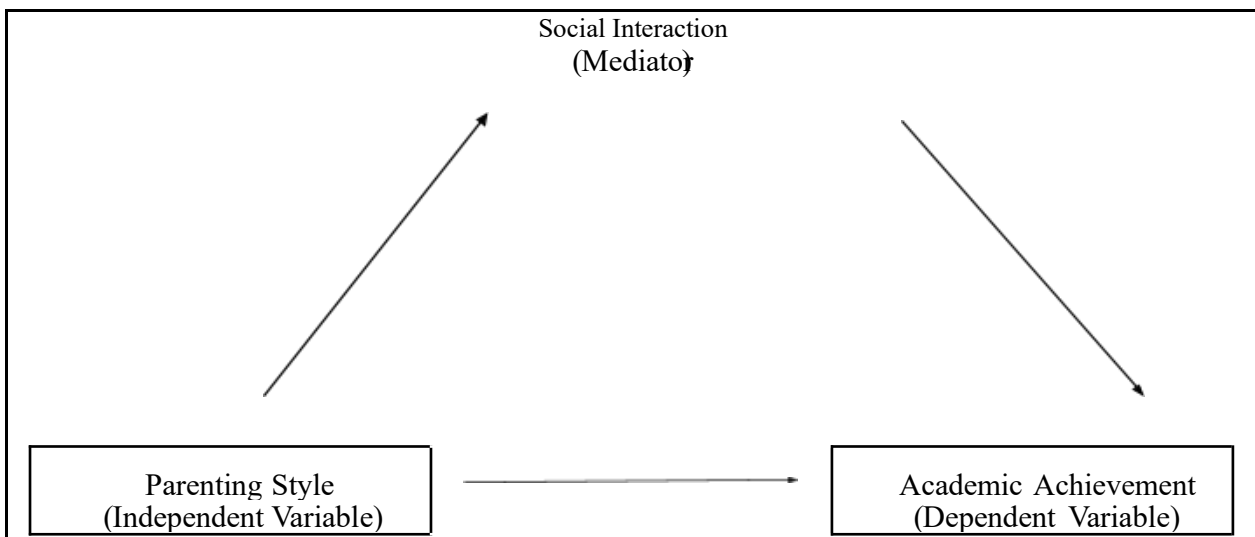
3. Method
3.1. Research Design
For the current study, a quantitative research method was used. A sample size consisted of 250 research participants in which 94 were males and 156 were females from 19 to 30 years (N-250). The participants were chosen by random sampling method from Government College University Faisalabad. They belonged to different socioeconomic status.

3.2. Operational Definitions of Variables
3.2.1. Parenting Style
parenting style refers to the systematic and measurable characterization of parental behaviors along two key dimensions: responsiveness and demandingness. Responsiveness is observed through behaviors such as nurturing, praising, and actively listening to the child, while demandingness is gauged by the setting of rules, monitoring activities, and enforcing boundaries (Maccoby and Martin, 1983; Baumrind, 1967, 1971, 1989, 1991). Parenting styles are classified into four distinct types: authoritative (high responsiveness and high demandingness),
authoritarian (low responsiveness and high demandingness), permissive (high responsiveness and low demandingness) and neglectful (low responsiveness and low demandingness).

3.3. Social Interaction
Social interaction refers to the observable and measurable exchanges between individuals that involve communication, behavior, and mutual influence. Sarah et al. (2022) explained that social interaction is characterized by the frequency, duration, and quality of verbal and non-verbal communication, such as talking, gesturing, eye contact, and body language. It includes both direct interactions, like conversations and physical activities, and indirect interactions, such as shared participation in a task.

3.4. Academic achievement
Academic achievement refers to the quantifiable and observable outcomes of a student's learning and performance in educational settings. Ricarda et al. (2015) stated that it is typically measured through standardized test scores, grade point averages (GPA), and the completion of coursework and degree programs. Academic achievement can also be assessed by specific indicators such as the number of honors received, proficiency in core subjects, and the attainment of educational milestones.

3.5. Instruments
3.5.1. Parental Authority Questionnaire
The Parental Authority Questionnaire (PAQ) is a standardized self-report instrument developed by John R. Buri in (1991). It measures parenting styles based on Baumrind's typology, encompassing three dimensions: authoritative, authoritarian, and permissive parenting. The PAQ includes items that assess behaviors and attitudes reflective of each style, such as setting rules (authoritarian), nurturing and responsive behaviors (authoritative), and lenient or indulgent practices (permissive). It has been widely used in research to examine the impact of parenting styles on various child outcomes, including academic performance, psychological well-being, and social behavior.

3.6. The Social Provisions Scale
The Social Provisions Scale (SPS), developed by Carolyn and Daniel (1987), is a self-report tool designed to assess the perceived availability and adequacy of social support. The SPS measures multiple dimensions of social endorsements, including emotional support, social integration, reassurance of worth, and reliable alliance. These

dimensions reflect the various ways individuals perceive support from their social networks, such as feeling valued, having companionship, and receiving practical help. The SPS has been widely used in research examining the role of social support in psychological and physical health outcomes.

3.7. Procedure

First of all we select the topic of our research then do the literature review and draw possible objectives and hypotheses. Taken permission from the writers of the scales. Sample becomes determined through the random sampling from Government College University Faisalabad. The demographic facts about variables including age, gender, education, socioeconomic status, no. of siblings, birth order, parent's education and occupation turned into collected. The parenting authority questionnaire, the provision social relation scale has been used to find out the relationship of the variables, to measure the academic achievement we use the CGPA of the last semesters. Earlier than test administration consistent with ethics informed consent changed into designed. All moral requirements of researchers were determined to accumulate records. The researcher for my part visited the population to ask them to take part within examine if they agree then the format in reality provided to them. Individuals have been informed about research and ensured that their facts can be stored personally on this observed scale, the parenting authority questionnaire and the provision of relation scale be used. Participants will be recognized for their involvement.

4. Results

The present study exploration is aimed to explore the role of Parenting style between social interaction and academic achievement among university students. For that purpose, a sample consisting of 250 research participants (N-250) out of which (n=156) are females and (n=94) are males belonging to an age group of 19 to 30 is selected from Government College University Faisalabad. The Parent Authority Questionnaire (PAQ) of 30 items and second one was the Social Provisional Scale (SPS) of 24 items administered to check the significant relationship of parenting style, social interaction and academic achievement among university students. Regression analysis is used to find out the statistical significance of the university students male and female both and the results are given here in the form of a table for different hypotheses respectively.

There were three ideas about what we might find in our study. During running analysis at the data and found some interesting results, which are shown in the tables below.

Table 1: Descriptive statistics of mean, median, mode and standard deviation analysis.

	SPS	PAQ
Mean	61.4308	96.9769
Median	61.0000	94.5000
Mode	61.00	90.00
Std. Deviation	5.30890	15.54963

Note. SPS = Social Provisions Scale; PAQ = Parenting Authority Questionnaire;

These descriptive statistics summarize the central tendency (mean, median, mode) and dispersion (standard deviation) of the two variables. Variable 1 has a mean of 61.4308, a median of 61.0000, and a mode of 61.00, with a standard deviation of 5.30890. Variable 2 has a higher mean of 96.9769, a median of 94.5000, and a mode of 90.00, with a larger standard deviation of
15.54963.

Table 2: Inter-correlation relationship of parenting style, academic achievement and social interaction among university students.

	1	2	3	4	5
1	1	.035	.317*	.345**	.257**
2		1	.137*	-.086	.715**
3			1	.180*	.715**
4				1	.306**
5					1

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).
Note. 1= Social Provisions Scale; 2 = CGPA; 3 = Permissive; 4 = Authoritarian, 5 = Authoritative

The correlation analysis revealed significant relationships among parenting authority styles, academic and social interaction scales. Permissive parenting showed a weak positive correlation with CGPA (r = .108, p < 0.01) and a strong positive correlation with authoritative parenting (r = .715, p < 0.01) and the Social Provision Scale (r = .806,

p < 0.01). Authoritarian parenting exhibited a moderate positive correlation with the Parenting Authority Questionnaire (r = .361, p
< 0.01) and a strong correlation with the Social Provision Scale (r = .655, p < 0.01). Authoritative parenting demonstrated a strong positive correlation with the Social Provisions Scale (r = .862, p < 0.01). Additionally, the Parenting Authority Questionnaire had a moderate positive correlation with the Social Provisions Scale (r = .394, p < 0.01). Overall, all three parenting styles—permissive, authoritarian, and authoritative—were significantly and positively correlated with both parenting authority measures and social interaction among students.

Table 3: Regression analysis process macro table to measure the mediating role of social interaction.

Predictor Variable	B	SE	p	B
Model 1: Outcome = SPS				
Constant	48.4018	1.9191	25.2209	.0000
PAQ	0.1344	0.0195	6.8754	.0000

Parenting style (PAQ) significantly predicts social interaction (PSIS) with B = 0.1344, SE = 0.0195, t = 6.8754,
p < .001, and Beta = 0.3935. So, this indicates that an increase in PAQ is associated with an

Effect	B	SE	t	p
Total Effect	0.0010	0.0014	0.7171	.4740

increase in SPS.

Direct Effect	0.0012	0.0016	0.7722	.4407
Indirect Effect (via SPS)	-0.0002	0.0006		

1.   Direct Effect of PAQ on CGPA (Model 2):
   ●   The direct effect of PAQ on CGPA is not statistically significant with B = 0.0012, SE = 0.0016, t = 0.7722, p = .4407, and Beta = 0.0523.
2.   Indirect Effect of PAQ on CGPA via SPS:
●   The indirect effect of PAQ on CGPA through PSIS is also not statistically significant, with an effect size of B = -0.0002, BootSE = 0.0006, BootLLCI = -0.0015, BootULCI =
0.0010.
3. Total Effect of PAQ on CGPA:
●   The total effect of PAQ on CGPA is not significant with B = 0.0010, SE = 0.0014, t = 0.7171, p = .4740, and Beta = 0.0446.

Table 4: Independent t-test to measure the gender differences.

		N	Mean	Sig.	t
PSRS	Male	104	61.4231	.081	-.019
	Female	156	61.4359		-.020
PAQ	Male	104	97.6731	.498	.589
	Female	156	96.5128		.603

Note. SPS = The Social Provisions Scale; PAQ = The Parenting Authority Questionnaire.
An independent t-test was applied to compare the mean scores of Social Provisions Scale (SPS) and the Parental Authority Questionnaire (PAQ) between male and female university students. The results showed no significant difference in PSIS scores between males (M = 61.4231) and females (M = 61.4359), with t(258) = -0.019, p = .081. Similarly, there was no significant difference in PAQ scores between males (M = 97.6731) and females (M = 96.5128), with t(258) = 0.589, p = .498. These findings indicate that gender does not markedly affect the levels of social interaction or precepts of parenting style among the university students in the sample.

5.   Discussion

Parenting is vital in influencing a child's personality development. Through their interactions, guidance and support, parents significantly influence how their children navigate relationships and achieve their goals. A child's early social skills, such as empathy, cooperation and communication are often rooted in their family interactions. Parents who model positive behavior, encourage sharing and foster respectful communication create a nurturing environment

where children can develop healthy social relationships. Unlike, children raised in homes characterized by conflict, neglect or abuse may struggle to form meaningful connections with others. Academic success is also closely linked to parenting. Parents who prioritize education, provide a healthy learning environment and offer academic support can significantly impact their children's academic performance. By setting high expectations, encouraging curiosity and helping with homework, parents can instil a love of learning and foster academic achievement. Additionally, parents who engage in stimulating activities outside of school such as visiting museums or reading together can broaden their children's horizons and enhance their intellectual development.

The first objective of study is to explore the relationship among parenting styles, academic achievement and social interaction among university students. Consistent with expectations and existing literature, authoritative parenting emerged as the most beneficial style positively influencing both social interaction and academic achievement. This parenting style, characterized by warmth, responsiveness and clear expectations. Parents appear to create an environment where students feel supported and motivated to perform well academically. Students raised in such environments are likely to develop problem-solving skills, higher self-esteem and more positive social interactions, which can translate into higher academic success (Ali et al., 2024). Authoritarian parenting, while showing some positive correlation with social interaction, did not demonstrate a significant positive impact on academic achievement. This suggests that while the structured and disciplined environment created by authoritarian parents may foster certain social skills, it might also create an environment that restricts creativity, critical thinking, and the intrinsic motivation needed for academic success. Academic achievement can be hindered by stress and teacher-student negative interaction (Javaid et al., 2024). Mindful teachers can communicate well (Javaid et al., 2023) and classroom environment and related attitudes matter (Ramzan et al., 2023).

Students who experience this form of parenting might feel pressured or stressed, which could potentially hinder their overall academic performance (Kamran et al. 2023). Permissive parenting displayed a minimal yet positive relationship with academic achievement, indicating that students from permissive households might have some degree of freedom and independence that can encourage self-directed learning. However, the lack of consistent boundaries and expectations associated with permissive parenting might not provide the optimal structure necessary for students to fully thrive academically. As such, these students may exhibit lower levels of discipline or perseverance when faced with academic challenges.

The second objective of the research is, there would be a significant mediating role of Social interaction between academic achievement and Parenting style. The analysis suggests that while parenting style significantly predicts social interaction, social interaction does not appear to mediate the relationship between parenting style and academic performance. Authoritative parenting behavior is linked with better social interaction skills. However, when examining the indirect effect of parenting style on academic achievement through social interaction as a mediator, the analysis might reveal that social interaction is important, but it does not fully explain the relationship between academic performance and parenting style(Yasmeen, 2013; Egeli & Rinaldi, 2016). Other factors, such as individual differences, school environment, or socioeconomic status, might also play a role. Social media plays crucial role in academic performance (Ramzan et al., 2023). Media sensitisation impacts roles and behaviours of children also the way parents perceive (Iqbal et al., 2024). Abusive parenting passes generation to generation (Javaid et al., 2024).

The last objective of our study is, there would be significant demographic differences on the role of parental style, social interaction and academic achievement among university students. The analysis shows that there are no significant gender differences in social interaction skills or parenting styles (Kashahu et al., 2014). On average, both male and female adolescents have similar levels of social interaction skills, as indicated by a non-significant t-test. This would suggest that gender does not significantly influence social interaction skills in this particular sample.

6. Conclusion

Authoritative parenting style, characterized by warmth, responsiveness, and clear expectations, emerged as the most beneficial for both social interaction and academic achievement. Students raised in such environments are more likely to develop positive social skills, better academic performance and higher self-esteem. While authoritarian Parenting style can foster certain social skills, it may also create a restrictive environment that hinders creativity, critical thinking, and intrinsic motivation. This can negatively impact academic achievement. While permissive parenting can encourage self-directed learning, it may lack the necessary structure for optimal academic success. Students from permissive households might exhibit lower levels of discipline and perseverance. Although social interaction is a crucial factor, it does not fully mediate the relationship of academic achievement and parenting style. Other factors, such as individual differences, school environment, or socioeconomic status, also play a role. The study found no significant gender differences in social interaction skills or parenting styles among the university students.

7. Implementations

The findings emphasize the importance of authoritative parenting in fostering positive outcomes for children. Parents should try to create a nurturing and supportive environment while setting clear expectations and providing guidance. Schools and communities can benefit from programs that promote positive parenting practices and support parents in developing the skills necessary to raise successful children. Future studies could explore the specific mechanisms through which parenting styles influence social interaction and academic achievement. Additionally, investigating the

role of other factors, such as individual differences and school environment, could provide a more comprehensive understanding of these relationships.

8. Limitations

The study analysis has the following limitations: Parents and children have different perceptions in regard to parenting. Relying on self-reports from students introduces bias, as individuals may have distorted perceptions of their own experiences or their parents' behaviors. Parents often overestimate their involvement in their children's lives, while children may underestimate parental involvement. Second, During study we faced challenges related to gender participation. Female students demonstrated a higher willingness to participate in the research compared to their female participants. This discrepancy led to a disproportionate representation of male participants, which may have biased the results. The underrepresentation of male data points could skew the findings and limit the generalizability of the conclusions across the entire student population.

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