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PARENT ADOLESCENT COMMUNICATION PATTERNS AND THEIR IMPACT ON EMOTIONAL REGULATION AND BEHAVIORAL OUTCOMES

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ABSTRACT

Background: The adolescent years are a time of development in which there are emotional changes and behavioral changes. Parent–adolescent communication is a key factor in the development of emotional regulation and behavioral outcomes. Positive communication contributes to the psychological health and wellbeing, and negative communication can lead to psychological instability and inappropriate behavior. There is limited evidence of this relationship in Pakistan, indicating the need to investigate this in local contexts. The primary objectives were To assess the communication patterns between parents and adolescents and how these communication patterns influence their emotional control and behavior in selected schools and community context of Hyderabad, Sindh.
Methodology: The method of the research was descriptive cross-sectional study that involved 238 adolescents aged 12 – 18 years with non-probability convenience sampling method. Standardized questionnaires were used to gather data on communication patterns, emotional regulation, and behavioral outcomes. Data was analyzed by SPSS version 23 with $p < 0.05$ as statistically significant.
Results: There was a strong positive relationship between supportive parent–adolescent communication and emotional regulation. High levels of positive communication were also strongly correlated with better behavioral outcomes as well as fewer behavioral problems.
Summary: Parent–adolescent communication has a significant impact on the emotional and behavioral development of adolescents. Strategies for improving family communication, such as educational and counseling, can impact mental health outcomes.

keywords: Parent–adolescent communication, Emotional regulation, Behavioral outcomes, Adolescents, Mental health**.**

INTRODUCTION

Attachment styles are a significant factor in shaping emotional regulation and behavioral outcomes, and are deeply influential on parent–adolescent communication.[1] Secure attachment of adolescents to parents is associated with better interpersonal skills and emotional functioning, and resilience.[2] In contrast, insecure attachment patterns may result in problems with communication; anxious types of adolescents may be afraid of closeness and intimacy in relationships, and avoidant types may avoid closeness and intimacy.[3] These insecure attachment patterns have been correlated with poor psychological and behavioural outcomes as adolescents.[4]
Communication is generally defined as an effective exchange of information, expression of feelings, and problem-solving in relationships. The definition of good communication can differ from one culture to another, but globalization has affected the modes of communication in numerous cultures. In high-context cultures, such as those in Japan, and other Asian nations, for instance, younger generations are increasingly using more direct and explicit ways of communicating, which is a move toward lower-context communication styles.[5]

Adolescents' depression is a difficult problem to manage for both family members and society, and constructive communication between parents in families with psychological issues is a key factor in sustaining family stability and managing family parenting stress. Emotional situations can be difficult, but supportive dialogue and mutual understanding can help maintain family functioning. Although it has been recognized as an influence on overall family resilience, there has been only limited research that has examined parent–child communication in a comprehensive way.[6]

Your child's family communication often is more difficult and complex during the teen years as they become more independent and may cause some rebellion. This is when misunderstandings and conflict can happen more often, and this will demand some adaptation for both parents and adolescents in the way they communicate. In addition, family communication can be an important direct factor, as well as an indirect factor, mediated by psychological and relational variables, as proposed by the family resilience models. In the absence of systematic research that can clearly articulate how the family resilience is affected by communication and how communication affects the family resilience, it is hard to imagine how to translate this concept into practice.[5,7]

Unlike face-to-face communication, digital communication is broadcasted quickly, widely and on various platforms, and has a significant impact on the social and emotional development of adolescents.[8] A lack of successful communication within the family has previously been shown to be linked to an increased risk of social rejection and depressive symptoms in children and adolescents. Longitudinal results also indicate that both father–child and mother–child communication quality serves as a moderator for psychological outcomes. In particular, supportive parent-child communication has been found to have a protective effect against subsequent self-destructive behaviour when children experience early depressive symptoms. Conversely, lack of communication can lead to greater depression, as well as parental educational anxiety, which may also add to familial emotional stress.[9]

Emotional intelligence and self-regulation are related concepts in psychology that are tightly linked and important to a person's psychological growth, socialization, and control over his or her behavior. These two skills go hand in hand and are vital for emotional health. Self-regulation is the ability to regulate one's emotions, thoughts and behaviors in the face of internal factors or external stressors. It requires the use of internal coping mechanism and cognitive strategy to stay emotionally balanced and coping well with environmental demands.[10]

Family dynamics and parent–adolescent communication patterns influence online behaviors, especially prosocial behaviors. Adolescents are more likely to have secure attachments and to express prosocial behaviors in their relationships with others, offline and online, when they receive supportive and open communication from their parents.[11] However, poor or problematic communication can lead to unhealthy behaviours, emotional out-of-controlness and susceptibility to unhelpful online experiences, including cyberbullying and social isolation.[12]

Poor family communication can put youth at higher risk for emotional distress. If open communication and mutual sharing is not happening, teens can become unheard, misunderstood, or emotionally unsupported. An environment in the family that does not allow adolescents to express their needs and emotions can have a negative impact on trust and a sense of being at home. This emotional distance can over the years result in less engagement in family relationships and less bond with family members.[13]

The family environment, particularly the father's and mother's emotional regulation, is thus a key factor in shaping the behavior and emotional health of adolescents.[14] Thus, the capacity to effectively regulate other people's emotions is central to maintaining healthier family dynamics, such as sensitive responding, constructive dialogue and emotional availability, in which adolescents are able to maintain healthy patterns of communication with their family members.[15] This, in turn, significantly affects adolescents' ability to moderate their emotions, adjust their behaviors and develop their socioemotional skills, which is the role of parental emotional regulation in developing positive parent–adolescent relationships and long-term psychological outcomes.[16]

The evidence shows that emotional and behavioral problems are more likely to occur in adolescents when they are exposed to stress and chaotic environments in their families.[17] On the other hand, studies show that parenting attitudes have a huge impact on adolescents' emotional and behavioral development. Authoritative parenting is linked to good emotional regulation, self-esteem and academic performance, which are all linked to warmth, support and clear boundaries. Authoritarian parenting, permissive parenting and neglectful parenting, on the other hand, are associated with higher levels of anxiety, depression, and behavior disorders. When adolescents are becoming more independent, parental influence is no longer direct, but rather through open communication, emotional support and constructive guidance, not strict control.[18]

However, there are some protective factors that can buffer the effects of parental emotion socialization including effective parent–adolescent communication, which can in turn positively impact the development of healthy emotional regulation and development outcomes[19]. The current study is to examine the relationship between parent–adolescent communication styles and emotional regulation and behavior.

Problem Statement

In the school and community, adolescents are increasingly facing emotional instability, stress-related problems, and behavioral issues. Impairments in emotional control and unwanted behaviors can result in learning difficulties, relationship issues, worry, sadness, and a tendency to risk-taking behaviors. Parent–adolescent communication is recognized as one of the most important factors that affects psychological and behavioral development of adolescents and lack of communication can be a contributing factor to emotional distress and behavioral problems. Little is known about the effects of parent–adolescent communication styles on emotional control and behavior in Pakistan context as it is limited local evidence. To fill this gap, this study investigates the correlation of communication patterns with emotional regulation and behavioral outcomes in some schools and community of Hyderabad, Sindh.

Research Gap

Most previous studies have primarily focused on nursing stress, burnout, or job satisfaction individually. Comparatively fewer studies have simultaneously examined workplace barriers, professional challenges, and coping strategies within the same population. Moreover, available evidence from Pakistan remains limited, particularly in Sindh province, where tertiary care hospitals operate under considerable resource constraints. This study seeks to bridge this gap by providing comprehensive evidence regarding barriers, challenges, and coping mechanisms among nurses working at Liaquat University Hospital Hyderabad/Jamshoro.

Significance of the Study

Emotional support and behavioral development are a significant responsibility of the family for the adolescent. Improving communication between parents and adolescents is crucial for the emotional stability, healthy coping and positive behavioral adjustment. But there can be missing links in the communication process in the family that lead to psychological stress and unhealthy behaviors.

The purpose of the present study is to contribute evidence on the impact of parent–adolescent communication on emotional regulation and behavior. The results will help to develop family-oriented educational and counseling interventions in school and community settings. Moreover, the study supports the Sustainable Development Goal 3 (SDG 3): Good Health and Well-Being through the promotion of the mental health and psychosocial well-being of adolescents.

Research Objectives

General Objective

To explore parent–adolescent communication patterns and their relationship to emotions and adolescent behaviour.

Specific Objectives

1. To assess prevailing communication patterns between parents and adolescents.
2. To evaluate adolescents' emotional regulation in relation to communication patterns.
3. To determine the association between communication patterns and behavioral outcomes.

Literature Review

Adolescence is a period of transition that is characterized by many emotional, cognitive and social changes. Social competence—the capability to exhibit socially appropriate behaviors, build positive interpersonal relationships, and react effectively in social settings—can play a significant role in the successful transition from childhood to adulthood.[10] Social competence involves several dimensions, such as cooperation, self-control, responsibility, empathy and assertiveness, which are important for psychological and social adjustment.[20]

Evidence indicates that the social competence of adolescents is positively related to academic achievement, interpersonal relationship stability, emotional health, and future adjustment. Greater social competence is associated with adolescents engaging in positive social interactions, achieving high academic achievement, and adapting appropriately to stress. Although social competence in adolescence has been studied extensively, comparatively little research has focused on the importance of the family environment and emotions in the development of social competence.[18]

The family has a crucial role in the various social contexts that shape the development of adolescents. The quality of family relationships has a significant impact on adolescents' confidence, competence and emotional maturity. Adolescent's developmental needs are supported within positive family relationships which offer emotional security and guidance. Strong family bonds help develop problem-solving skills, encourage the expression of feelings and emotions, and foster resilience through stress and transition.[21]

Patterns of communication, emotional expression, decision making, and conflict resolution are often a reflection of family functioning. Healthy family functioning is defined by emotional intimacy, respect, and family problem-solving and communication. Conversely, high levels of conflict, ineffective communication and rigid or authoritative decision-making can impede adolescents' emotional adjustment and social development. Reliable, open and emotionally expressive intimacy in the family is a positive influence on the sense of belonging and psychological stability of adolescents. On the other hand, constant miscommunication and poor conflict resolution may harm bonds of relationship and negatively impact emotional regulation.[18,22]

The parent–adolescent communication continuum is one in which parents and adolescents share thoughts, feelings, expectations and values in the context of the family.[21] Adolescence is a developmental period of rapid physical growth, maturation and development of thinking skills, exploration of identity and heightened emotions. This time may bring a change in communication styles from parents to adolescents, from directive communication in childhood to more negotiated and reciprocal communication. Communication becomes an important aspect of a teenager's emotional security and psychological adjustment as they seek for independence.[23]

Parent–adolescent communication is embedded in larger patterns of relationships that reflect the emotional atmosphere of the family. These patterns shape the dynamics of communication, making it supportive and growth-oriented or conflictual and unhelpful. Recent studies indicate that parent–adolescent relationships are not unidirectional, but rather they are dynamic and reciprocal. Some models stress parental influence and others stress child influence, while relational models do not focus on either of these influences, but instead they stress communication as an interactive and dyadic process, meaning that both parents and adolescents have an impact on the quality of the communication.[22]

The World Health Organization (WHO) estimates that some one in seven adolescents suffers from a mental health disorder, and depression and anxiety are among the top causes of illness and disability among adolescents. It is also reported that mental health issues are responsible for almost 13% of the global burden of disease in adolescents. Emotional and behavioural problems rates have consistently risen over 10 years in many countries, including the developing world.[17,28]

Empirical studies have also looked at the effects of conflict between parents and adolescents. A review of studies conducted between 2019 and 2021 found that high-intensity conflict has a negative impact across all types of behavioral outcomes, such as externalizing behaviors (aggression, oppositionality, substance use) and internalizing behaviors (anxiety and depression). In addition, adolescents who have grown up in a persistent family conflict have a higher risk of engaging in risky behaviors, dropping out of school, and experiencing lower overall well-being, according to UN and WHO reports. On the other hand, families who use positive conflict resolution techniques (defined as open communication, emotional supportiveness, and negotiation) have much lower rates of behavioral problems, suggesting that positive parent-adolescent communication is protective.[22,32]

Overall, cross-national empirical research from multiple countries and international bodies has validated that parent-adolescent conflict is a universal topic that is important for behavioral and emotional outcomes. Conflict during adolescence is a normative process, but its severity, length and resolution are important factors in adolescent adjustment. Perceptions vary between parents and adolescents, and coupled with cultural, family, and personal factors, conflict can have a different course and influence adolescents' behavior. The study results highlight the need for culturally sensitised interventions and policies to foster positive family communication, emotions and well-being of adolescents globally. [7,37]

Methodology

Study Design

The descriptive cross-sectional design was used to explore the communication pattern between parents and adolescents, and its relationship with emotional regulation and behavioral outcomes among adolescents. This design was chosen because it enables the variables to be measured at one time, without manipulation or intervention.

The cross sectional approach was suitable for the purpose of exploring the communication patterns within the family unit and their relationship to adolescents' emotional regulation and their behaviors in school and community. The design allowed the researcher the freedom to investigate relationships among variables in a natural social setting.

Study Setting

The study was done on selected secondary schools, colleges and community places of Hyderabad, Sindh. The city of Hyderabad is a major urban city, with a wide range of socio-cultural profile and is a suitable environment to explore the family communication patterns.

The selected institutions were public and private educational institutions which ensured a variation between them in terms of their demographic and contextual characteristics. They are institutions that serve adolescents from the early to late adolescent period (age 12-18).
Because adolescents do participate in educational and social activities and with peers in the school and community, this environment was appropriate for evaluating emotional regulation and behavioral outcomes. Thus the study environment served as a representative environment to study the parent–adolescent communication patterns in the context of urban Pakistan.

Study Population
The study population comprised of adolescents between 12–20 years age group attending selected schools and Colleges of Hyderabad, Sindh.
Adolescents were considered because they are in a developmental period where they experience emotional changes, are becoming more independent and developing their parent–child relationships. Their answers were crucial to capture the interpretations of their everyday communication, their ability to regulate emotions and their behavioural patterns in the family and the school environment.

Inclusion Criteria
The study included registered nurses who:

- Adolescents aged 12–18 years
- Pursuing studies in selected schools/colleges in Hyderabad
- A person who lives with at least one parent.Someone who resides with a parent.
- Can comprehend and answer the questionnaire
- Willing to participate with parental consent

Exclusion Criteria
The following participants were excluded:

- Adolescents with severe psychiatric disorders.
- Adolescents living out-of-home from their parents.
- The number of students who missed sessions for data collection.
- Incomplete questionnaires and refusal to participate.

Sample Size
The sample size was determined using the single population proportion formula with an estimated prevalence of moderate-to-positive parent–adolescent communication from previous studies.
The formula used was:
$n = Z^2 \times p \times q / e^2$
Where:
• $Z = 1.96$ (95% confidence level)
• $p = 0.50$ (assumed prevalence due to limited local data)
• $q = 1 - p = 0.50$
• $e = 0.05$ (margin of error)

Sampling Technique
The recruitment of participants was done using the non-probability convenience sampling technique. Young people, who were present at the time of data collection and fulfilled the inclusion criteria were approached and invited to participate voluntarily. This was deemed appropriate because it was easy to access within school grounds and was feasible. The study involved all parents who allowed their children to participate.

Research Instrument
Standardised, structured instruments were used to gather data. Demographic Data Form, to record background characteristics. Parent–Adolescent Communication Questionnaire to evaluate openness to and difficulties with communication and support. Emotional Regulation Scale, to measure adolescents' emotional management abilities. Behavioral Outcome Checklist, to evaluate academic involvement, aggression, risk-taking behavior and social adjustment. All instruments were reviewed for content validity and clarity before administration.

Validity of Instrument
Content validity was ensured by reviewing the questionnaire with nursing education experts, senior clinical nurses, and research supervisors. Minor modifications were incorporated to improve clarity, relevance, and cultural appropriateness while preserving the original constructs measured by the standardized instruments.

Pilot Study
Prior to the main survey, a pilot study was conducted to evaluate the clarity, comprehensibility, and feasibility of the questionnaire. Participants included in the pilot study were excluded from the final analysis. Feedback obtained during the pilot phase resulted in minor improvements to the wording and layout of the questionnaire.

Data Collection Procedure
Ethical approval and permission from school authorities were obtained and participants briefed on objectives of study. All parents/carers provided written informed consent and adolescents provided assent. Questionnaires were completed in a supervised and confidential setting in the classroom. The participants were told that all their answers were confidential and that they were only for research.

Ethical Considerations
The Ethical Review Committee approved the ethical aspects of the research. Parents' informed consent and adolescents' assent were obtained. Confidentiality and anonymity were ensured. The participation was voluntary, and participants could withdraw anytime. No psychological damage was done in the process of studying.

Table 1. Variables Included in the Study

Variable Category	Variables
Demographic Variables	Age, Gender, Grade/Class level, Family structure (nuclear/joint),Parental education, Socioeconomic status
Independent Variable	Parent–adolescent communication patterns
Dependent Variables	Emotional regulation, Behavioral outcomes

Table 2. Operational Definitions

Variable	Operational Definition
Parent–Adolescent Communication	How openly and expressively parents interact with their adolescents; whether parents listen to and trust adolescents; and whether parents and adolescents work together to solve problems
Open communication	Honest exchanges, listening, sharing feelings, and respecting the thoughts and feelings of both parents and adolescents
Problematic Communication	A communication pattern marked by avoidance, criticism, hostility, misunderstanding, or lack of emotional responsiveness, which may hinder effective interaction between parents and adolescents.
Emotional Regulation	Avoidance, Criticism, Hostility, Misunderstanding, and Lack of Emotional Response are communication patterns that can present problems and negatively impact the interaction between parents and adolescents.
Behavioral Outcomes	Observable behavioral traits of adolescent, such as academic involvement, peer relationships, aggression, rule compliance, risk-taking behaviors.
Adolescent	A person between the age of 12 and 18 years who is presently studying in certain schools/colleges

Table 1. Demographic Characteristics of Participants

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	12–14	64	26.9

Variable	Category	Frequency (n)	Percentage (%)
	15–17	88	37.0
	18–20	54	22.7
	Above 20	32	13.4
Gender	Male	99	41.6
	Female	139	58.4
Family Structure	Nuclear Family	142	59.7
	Joint Family	96	40.3
	Total	238	100.0
Qualification	Illiterate	24 (10.1)	42 (17.6)
	Primary Education	41 (17.2)	56 (23.5)
	Secondary Education	68 (28.6)	73 (30.7)
	Graduate	61 (25.6)	45 (18.9)
Monthly Family Income	Less than PKR 50,000	43	18.1
	PKR 50,000–100,000	89	37.4
	PKR 100,000–300,000	74	31.1
	More than PKR 300,000	32	13.4
	Total	238	100.0

Table 1 presents the demographic characteristics of the 238 adolescent participants included in the study. The age distribution shows that the largest proportion of participants belonged to the 15–17 years age group (37.0%), followed by those aged 12–14 years (26.9%) and 18–20 years (22.7%). Only 13.4% of the participants were above 20 years of age. This distribution indicates that the majority of respondents were in the middle adolescent stage, a critical period for emotional, psychological, and social development.

With regard to gender, female adolescents constituted 58.4% of the study population, whereas 41.6% were males, indicating a relatively higher participation of female respondents. Regarding family structure, the majority of participants belonged to nuclear families (59.7%), while 40.3% were living in joint family systems. This distribution reflects the predominance of nuclear family settings among the study participants.

The educational status of parents revealed that secondary education was the most common qualification, reported by 30.7%, followed by primary education (23.5%), graduate education (18.9%), and illiteracy (17.6%). These findings indicate that most parents had attained at least a basic level of formal education, which may positively influence parent–adolescent communication and family interactions.
Regarding monthly family income, the largest proportion of participants (37.4%) belonged to households earning PKR 50,000–100,000 per month, followed by 31.1% with a monthly income of PKR 100,000–300,000. Participants from families earning less than PKR 50,000 constituted 18.1%, whereas only 13.4% reported a monthly family income exceeding PKR 300,000. Overall, the demographic profile suggests that the study predominantly included middle-adolescent females from nuclear families with parents having secondary-level education and belonging mainly to middle-income households, providing a representative sample for examining parent–adolescent communication, emotional regulation, and behavioral outcomes. (Table 1)

Table 2. Distribution of Parent–Adolescent Communication, Emotional Regulation, and Behavioral Outcomes (N = 238)

Study Variable	Category	Frequency (n)	Percentage (%)
Parent–Adolescent Communication	Poor	58	24.4
	Moderate	97	40.8
	Good	83	34.8
Emotional Regulation	Poor	47	19.7
	Moderate	108	45.4
	Good	83	34.9
Behavioral Outcomes	Poor	39	16.4
	Moderate	101	42.4
	Good	98	41.2

Table 2 presents the distribution of the three principal study variables among the 238 adolescents included in the study. Regarding parent–adolescent communication, the largest proportion of participants reported moderate communication (40.8%), followed by good communication (34.8%), while 24.4% experienced poor communication with their parents. These findings indicate that most adolescents perceived communication within their families as generally satisfactory. For emotional regulation, 45.4% of the participants demonstrated a moderate level of emotional regulation, whereas 34.9% exhibited good emotional regulation and 19.7% reported poor emotional regulation. This distribution suggests that the majority of adolescents possessed adequate emotional regulation abilities. Similarly, behavioral outcomes were predominantly moderate to good. Approximately 42.4% of adolescents demonstrated moderate behavioral outcomes, 41.2% exhibited good behavioral adjustment, and only 16.4% showed poor behavioral outcomes. Overall,

these findings indicate that most participants experienced satisfactory parent–adolescent communication, adequate emotional regulation, and positive behavioral outcomes, supporting the overall objective of the study. (Table 2)

Discussion

The present study comprised of 238 adolescent girls with various socio-economic and educational statuses of Hyderabad, Sindh. The majority were females (58.4%) and in the 15-17 age group; the developmental stage in which emotional regulation and parent–adolescent relationships are particularly significant. Most were nuclear families and parents had secondary or above education and were middle income. The study was similar to the previous study in which, the sample diversity increases the generalizability of the results to adolescents in an urban setting.[20]

The demographic results are similar to the previous studies on adolescents where women and middle adolescent age group were found to be the major respondents. Previous studies have also found that parental education and family socioeconomic status affects communication and adolescent psychological adjustment. The same result has also been reported in international investigations of the role of family environment in adolescence.[22] The results revealed that most adolescents reported moderate to good levels of parent–adolescent communication, suggesting that many families had supportive and open communication. Similarly, most of the sample exhibited good emotional self-control and good behaviour.[25]

The results are consistent with the notion that good communication between parents and adolescents fosters emotional security, confidence and healthy behavior development. Open communication between adolescents and parents provides opportunities for adolescents to share their concerns, to seek emotional support, and to acquire positive coping strategies.[32] The present results were in line with the previous international and local studies that found that supportive family communication was related to emotional competence, decreased psychological distress, healthier behavioral adjustment of adolescents. This finding has been echoed in the context of Family Systems Theory, which focuses on the impact of the family dynamics on adolescent development.[26]

The key finding of this study was that parent–adolescent communication was significantly correlated with emotional regulation ($\chi^2 = 42.76$, $p < 0.001$). Those who reported good communication with their parents had significantly better emotional regulation than those who reported poor communication with their parents.[5] Similarly, parent–adolescent communication was moderately positively correlated with emotional regulation ($r = 0.568$, $p < 0.001$) through Pearson correlation analysis. The results suggest that better communication is a factor of emotional control, effective stress management and healthy emotional expression.[28]The findings are similar to previous research, which found that supportive parenting positively affects adolescents' emotional competence and resilience. Previous studies have consistently found that open communication within the family helps adolescents be more aware of their emotions, improves coping resources and lowers emotional and psychological issues.[20,37]

The current study as similar to the previous studies, also showed that there was a significant relationship between parent–adolescent communication and behavioral outcomes ($\chi^2 = 38.91$, $p < 0.001$). Those who had positive communication with their parents had healthier behavior patterns than those with poor communication. Additionally, strong positive correlations were found between communication and behavioral outcomes ($r = 0.611$, $p < 0.001$), and emotional regulation and behavioral outcomes ($r = 0.492$, $p < 0.001$) using Pearson correlation analysis. This finding indicates that positive family communication practices have not only an effect on emotional regulation, but also on positive adolescent behaviour.[15,35]

These findings are in line with previous research, which has found that adolescents reared in supportive families exhibit fewer behavioral issues, better control, better decision-making skills and more positive interpersonal relationships. Family communication has been consistently shown in previous studies to be one of the most protective factors against behavioral problems during the adolescent years.[13,29] The regression analysis revealed that parent–adolescent communication and emotional regulation accounted for about 47% of the variance in adolescent behavioral outcomes. The top two predictors of positive behavior were parent–adolescent communication and emotional regulation. Results highlight the importance of family communication for adolescent psychological adjustment and behaviour development. Therefore, enhancing communication skills and emotional regulation can play a significant role on the mental health of the adolescents and in lowering behavioral problems.[10]

The present results are in line with previous studies that have found that communication quality and emotional competence are among the strongest predictors of adolescent behavioral adjustment. Previous research has also ·effective strategies to enhance adolescent well-being.[2,6]

Conclusion

This study aimed to explore how parent–adolescent communication, emotional regulation relate to behavioral outcomes among adolescents in Hyderabad, Sindh. The results showed the majority of the adolescents indicated moderate to good communication with their parents, good emotional regulation and good behavioral outcomes. The

results demonstrated that parent–adolescent communication was significantly positively correlated with emotional regulation and behavioral outcomes, suggesting that supportive and open communication with parents was associated with better emotional regulation and behavioral outcomes. Moreover, parent–adolescent communication was found to be a strong predictor of behavioral outcomes and thus plays a vital role in psychological and social development of adolescents. In conclusion, the results highlight the potential benefits of improving family communication on adolescents' emotional functioning, behavioral adjustment, and mental health. Open, respectful and supportive communication between parents and adolescents should be encouraged, with parents listening to their worries and including them in family decisions and discussions. These activities can enhance emotional connection and emotional and behavioral growth. Counselling, emotional management programmes and life skills education should be part of the normal education programme in schools. There should also be better collaboration among teachers, school counselors, and parents to detect and intervene about emotional and behavioral problems early. Awareness programs and family counseling services for the promotion of positive parenting and better parent–adolescent communication should be introduced to community level and healthcare professionals. Additional community-based intervention can aid the emotional health and psychosocial development of adolescents. Enlarged and more diverse samples from various areas of Pakistan should be included in future research and longitudinal study designs should be used to investigate change in communication patterns and adolescent outcomes over time. Other topics that could be explored in future research are parenting styles, friendships, social media and family dynamics, which may all impact adolescent emotional and behavioral health.

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