

Cognitive Emotion Regulation in Children Is Attributable to Parenting Style, Not to Family Type and Child's Gender

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Abstract—The study aimed to investigate whether cognitive emotion regulation in children varies with parenting style, family type and gender. Toward this end, cognitive emotion regulation and perceived parenting style of 206 school children were measured. Standard regression analyses of data revealed that the models were significant and explained 17.3% of the variance in *adaptive* emotion regulation (Adjusted $R^2=0.173$; $F=9.579$, $p<.001$), and 7.1% of the variance in *less adaptive* emotion regulation (Adjusted $R^2=.071$, $F=4.135$, $p=.001$). Results showed that children's cognitive emotion regulation is functionally associated with parenting style, but not with family type and their gender. Amongst three types of parenting, authoritative parenting was the strongest predictor of the overall *adaptive* emotion regulation while authoritarian parenting was the strongest predictor of the overall *less adaptive* emotion regulation. Permissive parenting has impact neither on *adaptive* nor on *less adaptive* emotion regulation. The findings would have important implications for parents, caregivers, child psychologists, and other professionals working with children or adolescents.

Keywords—Cognitive Emotion Regulation, Adaptive, Less Adaptive, Parenting Style, Family Type.

I. INTRODUCTION

IN everyday life we often experience strong emotions that need to be managed in order to function well in the family, office or workplace, and community or society etc. Managing or regulating emotions means understanding and filtering emotional experience, using healthy strategies to control uncomfortable emotions and engaging in appropriate behavior (e.g. attending classes, going to work, engaging in friendships or social relationships) when distressed. Thus emotion regulation has both cognitive and behavioral aspects. We are interested here in the cognitive aspect. Cognitive emotion regulation is defined as the conscious, cognitive way of managing the intake of emotionally arousing information [1]. Theories of cognitive emotion regulation posit that thinking and acting are two different processes and, therefore, consider cognitive strategies of emotion regulation in a conceptually pure way, separate from behavioral strategies [2], [3]. The cognitive strategies that people generally use to regulate their

emotions in different settings can be divided into two broad categories: *adaptive* strategies and *less adaptive* strategies. Garnefski, Kraaij and Spinhoven [4] identified nine conceptually separate emotion regulation strategies through principal component analyses of which five strategies fall in the *adaptive* category and four in the *less adaptive* category. The *adaptive* category includes acceptance, positive refocusing, refocus on planning, positive reappraisal and, putting into perspective strategies. The *less adaptive* category includes self-blame, rumination or focus on thought, catastrophizing and blaming others strategies. Acceptance refers to thoughts of accepting what one has experienced and resigning oneself to what has happened. Positive refocusing means having positive, happy and pleasant thoughts instead of thinking about threatening and stressful events. Refocus on planning means having thoughts about what to do and how to handle the experience one has had. Positive reappraisal means having thoughts to give a positive meaning to the negative events in terms of personal growth. Putting into perspective means emphasizing thoughts about the negative event compared to other events. Self-blame means having thoughts that blame one-self for what one has experienced. Rumination means having thoughts about the feelings and thoughts associated with the negative event. Catastrophizing refers to thoughts of explicitly emphasizing the terror of an experience. Blaming others refers to thoughts of putting the blame of what one has experienced on others.

Scientists posited that *adaptive* strategies are central to well-being and successful functioning [5]. People who adopt *adaptive* strategies report fewer emotional problems (e.g., depression, anxiety symptoms) than do people who use *less adaptive* strategies [2], [4].

Emotion regulation is essential to socialization and is dependent on the culture one lives in as well as the specific social context of the situation. Emotion regulation develops during the stages of childhood, adolescence and adulthood. We are particularly interested in how it develops during adolescence. Researchers have shown that the neurological changes improve the regulation of emotion over the course of adolescence. As adolescents grow they also learn how to regulate emotions which has both positive and negative impacts on their relationships with family, neighbors and friends. However, we still do not know about the role of parents or family in its development. Thus we are interested to see what kind of strategies children use (Adaptive or Less

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Adaptive?) in what kind of family and parenting situations to regulate their emotions. In any society, family is the most important socializing agent for a child. The child's interactions with the family members in general and with the parents in particular can play a crucial role in its cognitive and socio-emotional development [6]. This role can be much more important in a collectivistic society such as in Bangladesh. In Bangladesh there are mainly two types of family: nuclear family and extended family. The nuclear family includes only the husband, the wife and unmarried children who are not of age and therefore share living quarters. The extended family contains the nuclear family living together with blood relatives, often spanning three or more generations. The child in a nuclear family interacts only with its parents and siblings whereas in an extended family the child interacts with a vast number of family members. Besides, the child is an active observer of the interactions among all family members and therefore be affected by the complexity of interactions.

Although children at adolescence give more importance to their peer group than parents, but parents and families have strong influence over them. Berndt [7], and Young and Ferguson [8], for example, found that although both sexes are highly peer oriented, males and females at different times in adolescence are influenced by their parents. Parenting is a complex activity that includes many specific behaviors that work individually and together to influence child outcomes. Parenting styles have been described as the collection of parents' behaviors which create an atmosphere of parent-child interactions across situations [9]. Based on the work of Baumrind [10]-[12] three broad typologies of parenting styles such as *authoritative*, *authoritarian* and *permissive/indulgent* have been identified. *Authoritative* parenting offers a balance between high nurturance and high control [13]. Here, expectations are clear, rules are firm and rational, and discipline is administered in a consistent manner [14]. *Authoritative* parents do not reward dependency [13], but instead set a standard of responsibility and self-control. *Authoritarian* parents tell their children exactly what to do. Thus it is characterized by high control with low levels of warmth. *Authoritarian* parents are obedience and status-oriented, and expect their orders to be obeyed without question [15]. In this form of one-way communication, the child is not permitted to express its views or opinions. Measures of coercive and punitive control, such as physical or emotional punishment, are often used by authoritarian parents as a means of disciplining the child. In addition to high control and demand, *authoritarian* parents show little warmth, involvement, support, or emotional commitment to their child [13]. *Permissive/indulgent* parents allow their children to do whatever they wish. Thus it is characterized by high levels of warmth and low levels of control. That is, *permissive* parents tend to be non-demanding and avoidant of controlling behavior or outlining boundaries in the children's environment [13]. Bad behavior of the child is seldom acknowledged or corrected by parents, and rules are either not enforced or not clearly communicated and are therefore

inconsistent and confusing. In this style of parenting children are often left to regulate their own activities, behavior, and emotions at a young age.

The three models of parental control are linked to a variety of outcomes during childhood and adolescence. Specifically, beginning in early-childhood *authoritative* style of parenting has been shown to produce higher levels of social competence [14], a greater ability to regulate emotions, high social skills [16] and self-regulation [13]. During the years of middle-childhood, children reared by *authoritative* parents excel in areas of independence, creativity, persistence, social skills, academic competence, leadership skills, social perspective-taking, and self-control [17]. Adolescents of *authoritative* parents have higher self-esteem, are socially confident and competent [14] are self-reliant, have greater respect for their parents [15], display increased academic performance [18], engage in fewer acts of deviant behavior and more pro-social behavior. *Authoritarian* parenting, by contrast, is associated with a myriad of negative outcomes throughout development [19], [20]. Preschool-age children exposed to *authoritarian* parenting have been found to be unhappy, dissatisfied, apprehensive, fearful, socially inhibited, aggressive, and experience difficulty in regulating emotions [10], [13], [21]-[23]. Studies have reported low self-esteem, low sociability, moodiness, obedience, and apprehensiveness in adolescents of *authoritarian* parents [24]. *Authoritarian* parenting has been suggested to have a positive association with adolescent delinquency [25], [26], and a negative association with adolescent stress, self-esteem, and substance abuse [27]. *Permissive* parenting has been linked to bossy, dependant, impulsive behavior in children, with low levels of self-control and achievement; these children do not learn persistence and emotional control [10]. While positive outcomes of permissive parenting may include close parent-child relationships, greater self-esteem, and more autonomy [28], this parenting style often fosters more serious problems in adolescence such as drug use and deviant behavior [15], [29], and lower academic achievement [18].

In all stages of life, people have to deal with a wide range of stressors and challenges to adapt to the world. Especially, the period of adolescence forms an important stage in the development of cognitive coping skills as this is the period in which the more advanced cognitive abilities are being mastered [30]. A child in its early relationship with parents learns to deal with other people and manage its own emotions. Feelings of pain and stresses may emerge in every area of interactions in child's life and in these situations children usually manage to deal with that problem according to what they learn from their parents. That is, children acquire skills and competence necessary to regulate emotions after experiencing any threatening event simply through parent-child interactions. Studies have shown that children's emotion regulation can be dependent on the style of parenting they are experiencing (see above). One limitation of those studies is that they are biased to the scenario of individualistic societies. A second limitation is that they mostly focused on the

behavioral part of emotion regulation. The cognitive part of emotion regulation has been studied in relation to parenting style and child's gender insufficiently and not at all in relation to family type. Therefore, the present study investigated whether parenting style can determine that a child would employ *adaptive* or *less adaptive* strategies in regulating emotions. It also examined the impacts of family type (nuclear or extended) and child's gender on cognitive emotion regulation strategies. The reason of considering child's gender as a potential variable is that male children have traditionally been favored in Bangladeshi culture because daughters will be married and leave the home, while sons will bring benefits to the family [31]. Girls have less freedom than boys and are more controlled by their families almost in all societies. They have to be more responsible and are permitted less fun. We assume that these gender discriminations might contribute to the adolescent's emotion regulation.

II. METHOD

A. Participants

206 children (40% boys, 60% girls) aged 12-15 were selected from four secondary schools of Dhaka City. The schools were chosen randomly from a list supplied by the Bangladesh Bureau of Educational Information and Statistics (BANBEIS). From each school a specific grade was selected by the same method. Thus four grades were selected: Grades VII, VIII, IX and X. The children of the selected grades who attended the class were all included in the study. Thus 48 children were from grade VII, 44 from grade VIII, 44 from grade IX and 70 from grade X. 71% of the children belonged to nuclear families and 29% to extended families.

B. Measures

1. Cognitive Emotion Regulation Questionnaire

The Cognitive Emotion Regulation Questionnaire (CERQ) is a 36-item questionnaire originally developed by Garnefski et al. [3]. It is a five-point Likert type scale ranging from 1 (almost never) to 5 (almost always). The scale has nine sub-scales, each consisting of four items, each item referring to what someone thinks after the experience of threatening or stressful life events. The subscales are grouped broadly into *Adaptive* and *Less Adaptive* emotion regulation strategies. Acceptance, Positive Refocusing, Refocus on Planning, Positive Reappraisal, and Putting into Perspective are in the *adaptive* group. The *Less Adaptive* strategies include Self-blame, Rumination, Catastrophizing and Blaming Others. The sub-scales have good internal consistencies ranging from 0.68 to 0.83 and test-retest reliabilities ranging from 0.48 to 0.65 [3]. The CERQ has good factorial validity, discriminant validity and construct validity [3].

In the present study, the scale was translated into Bangla and adapted within the socio-cultural context of Bangladesh. At first, all the items and instructions were translated into Bangla. Then it was given to five judges- two professors of

Bangla, two professors of English and one professor of Psychology- to judge appropriateness of the translation and content validity of the scale. Taking all their opinions, suggestions and recommendations into consideration the items were reviewed, finalized and administered on a sample of 100 secondary school students. The split-half reliability of the Bangla version as calculated by the Spearman-Brown formula is 0.78. As reported by the judges the Bangla version has good content validity.

2. Parental Authority Questionnaire

The Parental Authority Questionnaire (PAQ) is a 30-item measure originally developed by Buri [32]. It is a five-point Likert type scale ranging from 1 (disagree) to 5 (agree). The scale has three subscales, namely *Authoritative Parenting*, *Authoritarian Parenting* and *Permissive Parenting*. Each sub-scale contains 10 items. Cronbach's α coefficients for the *Permissive*, *Authoritative* and *Authoritarian* sub-scales are 0.61, 0.79 and 0.72 respectively. The full scale has Cronbach's α coefficients of 0.74 to 0.87 and test-retest reliabilities of 0.77 to 0.92 [32]. The construct validity of the original scale was tested by correlating parenting style with self-esteem. Self-esteem correlated inversely with authoritarianism and positively with authoritativeness and was unaffected by permissive parenting [32].

Following the same procedures as above the scale was translated into Bangla and adapted within the socio-cultural context of Bangladesh. The Bangla version has good content validity as reported by all the judges. The split-half reliability of the full scale calculated by the Spearman-Brown formula is 0.72.

C. Procedures

Standard data collection procedures were followed here. One of the authors of this paper personally met each head of the selected schools, narrated the general purpose of the study and finally got permission to collect relevant data from the students. On the appointed date and time she went to a particular school and then to the selected class where she was introduced by the head of the school. At the beginning, the students were briefed about the general purpose of the study and good rapport was established with them. They were also informed that the investigation is purely academic and their responses to the questionnaires would be kept confidential. When the psychological climate of the class was good enough, the above questionnaires were distributed to the participants. Soon after distributing the questionnaires, they were asked to record their socio-demographic information (age, gender, class, family type, parents' educational status, marital status, occupation, socio-economic status). Prior to responding the items, participants were requested to make a silent reading of the standard instructions printed on the questionnaires. Also, clarifications were made whenever they faced any problems to understand the items. Thus two different scales were administered to them at a single sitting. At first, they responded to the CERQ and then to the PAQ. After

completion of their task, the questionnaires were collected and they were given thanks for their participation. Thus data collection was completed in all the selected schools.

D. Data Processing and Analysis

Participants' responses were scored according to the scoring systems of the PAQ and CERQ respectively. Each participant received three types of scores on the PAQ: Permissive score, Authoritative score and Authoritarian score. They received two major scores on the CERQ: *Adaptive* score and *Less Adaptive* score. As this research was correlational in its design, data were analyzed in multiple regression using the overall *Adaptive* and the overall *Less Adaptive* emotion regulations as criterion variables and permissive, authoritative, authoritarian parenting, family type and child's gender as predictor variables. Data for each *Adaptive* (acceptance, positive refocusing, refocus on planning, positive reappraisal and putting into perspective) and *Less Adaptive* (self-blame, rumination, catastrophizing and blaming others) strategy were also subjected to the same kind of statistical operations. Before carrying out any analysis the major assumptions of the multiple regression were examined. Specifically, the assumption of linearity was examined by partial regression plots, the assumption of normality by histogram and normal P-P plot, the assumption of homoscedasticity by scatter plots and multi-collinearity by the predictors' tolerances. All these assumptions were met in the present data.

III. RESULTS

The results of the present study are illustrated below showing how children's cognitive emotion regulation varies with parenting style, but not with family type and child's gender.

A. Adaptive Cognitive Emotion Regulation

When analyzed the *adaptive* cognitive emotion regulation data in multiple regression using 'Enter' method a significant model emerged which explained 17.3% of the variance in *adaptive* cognitive emotion regulation (Adjusted $R^2=0.173$; $F=9.579$, $p<.001$). The figures in Table I indicate that *adaptive* cognitive emotion regulation has a functional relationship with parenting style. As revealed by the standardized β , *authoritative* parenting style ($\beta=.376$, $p<.001$) was the strongest predictor of *adaptive* cognitive emotion regulation when the variance explained by all other variables in the model was controlled. A second significant predictor of this type of emotion regulation was the *authoritarian* parenting style ($\beta=.197$, $p<.005$). Part correlation coefficient of the former predictor was .334 and that of the predecessor was .190 (not shown in the table). Thus the unique contribution of the *authoritative* parenting (squared of part correlation multiplied by 100) to the variance in *adaptive* cognitive emotion regulation was 11.16% and that of the *authoritative* parenting was 3.61%.

TABLE I
REGRESSION OF ADAPTIVE COGNITIVE EMOTION REGULATION ON PERMISSIVE PARENTING, AUTHORITATIVE PARENTING, AUTHORITARIAN PARENTING, FAMILY TYPE AND CHILD'S GENDER

Predictor	Unstandardized coefficients		Standardized coefficients	<i>t</i>	<i>p</i>
	<i>B</i>	<i>SE</i>	β		
(Constant)	36.68	6.475		5.66	.0001
PP	.121	.187	.047	.646	.519
ATVP	.641	.122	.376	5.256	.0001
ATNP	.317	.106	.197	2.995	.003
¹ FT (N)	2.451	1.793	.088	1.367	.173
² CG (M)	-2.29	1.725	-.087	-1.32	.187

Adjusted $R^2=0.173$ ($F=9.579$, $p<.001$)

PP= Permissive Parenting, ATVP= Authoritative Parenting, ATNP= Authoritarian Parenting, FT (N)= Family Type (Nuclear), CG (M)= Child's Gender (Male).

¹FT (N) was used here and subsequently as a dummy variable coded as '1' or '0'. '1' stands for membership of a nuclear family and '0' stands for non-membership of a nuclear family. So, when '1' changes to '0' the variable switches to Family Type (Extended). The same logic applies for ²CG (M) variable.

When data for each *adaptive* strategy were analyzed separately, results were highly consistent with the results for the overall *adaptive* cognitive emotion regulation as above. That is, *authoritative* parenting was the strongest and/or only predictor of the child's scores in positive refocusing ($\beta=.341$, $p<.001$), refocus on planning ($\beta=.286$, $p<.001$), positive reappraisal ($\beta=.310$, $p<.001$) and putting into perspective ($\beta=.256$, $p=.001$) strategies. Although authoritarian parenting was identified as a significant predictor of positive refocusing ($\beta=.138$, $p<.05$) and putting into perspective ($\beta=.183$, $p=.01$) strategies it was weaker than authoritative parenting. However, none of the variables could explain child's score in acceptance strategy.

A. Less Adaptive Cognitive Emotion Regulation

When analyzed the *less adaptive* cognitive emotion regulation data using the same method as above a significant model emerged, explaining 7.1% of the variance in *less adaptive* cognitive emotion regulation (Adjusted $R^2=.071$, $F=4.135$, $p=.001$). The figures in Table II indicate that *less adaptive* cognitive emotion regulation has a functional relationship with parenting style. As revealed by the standardized β , *authoritarian* parenting style ($\beta=.294$, $p<.001$) was the strongest and only significant predictor of *less adaptive* cognitive emotion regulation when the variance explained by all other variables in the model was controlled. Part correlation coefficient of this predictor was .283 indicating that *authoritarian* parenting contributes 8.01% of the variance in *less adaptive* cognitive emotion regulation (squared of part correlation multiplied by 100).

TABLE II
REGRESSION OF LESS ADAPTIVE COGNITIVE EMOTION REGULATION ON
PERMISSIVE PARENTING, AUTHORITATIVE PARENTING, AUTHORITARIAN
PARENTING, FAMILY TYPE AND CHILD'S GENDER

Predictor	Unstandardized coefficients		Standardized coefficients	<i>t</i>	<i>p</i>
	<i>B</i>	<i>SE</i>	β		
(Constant)	34.597	5.394		6.414	.0001
PP	.166	.156	.083	1.064	.289
ATVP	-.028	.102	-.021	-.273	.785
ATP	.371	.088	.294	4.210	.0001
¹ FT (N)	-.053	1.493	-.002	-.035	.972
² CG (M)	-.950	1.437	-.046	-.661	.509

Adjusted $R^2=.071$ ($F=4.135$, $p<.001$)

When data for each *less adaptive* strategy were analyzed separately, results were consistent with the results for the overall *less adaptive* cognitive emotion regulation as above. That is, *authoritarian* parenting was the strongest and only predictor of child's scores in self-blame ($\beta=.235$, $p<.001$), rumination or focus on thought ($\beta=.262$, $p<.001$) and catastrophizing ($\beta=.214$, $p<.005$) strategies. However, none of the variables could explain child's score on blaming others.

To summarize, amongst the three types of parenting *authoritative* parenting was the strongest predictor of *adaptive* cognitive emotion regulation while *authoritarian* parenting was the strongest predictor of *less adaptive* cognitive emotion regulation in children. All other variables including *permissive* parenting, family type and child's gender predicted neither *adaptive* nor *less adaptive* cognitive emotion regulation.

IV. DISCUSSION

The study demonstrated that cognitive emotion regulation in children varies with parenting style, but not with family type or child's gender. The important features of the findings are discussed below.

A. Authoritative Parenting Works Best for Adaptive Cognitive Emotion Regulation in Children

As demonstrated, both *authoritative* and *authoritarian* parenting significantly contributed to the child's *adaptive* cognitive emotion regulation (Table I). In such contribution, *authoritative* parenting excelled (11.16%) over *authoritarian* parenting (3.61%). Results indicate that a change of 1 standard deviation in *authoritative* parenting resulted in a change of .376 standard deviations in the *adaptive* cognitive emotion regulation, whereas a change of 1 standard deviation in *authoritarian* parenting resulted in a change of .197 standard deviations in the variable. Thus *authoritative* parenting is better than *authoritarian* parenting for children to develop rational and positive thoughts, happy and pleasant thoughts. These findings are consistent with the past findings. For example, past studies found that children reared by *authoritative* parents show higher levels of social competence [14], a greater ability to regulate emotions, high social skills [16] and self-regulation [13]. They also excel in areas of independence, creativity, persistence, academic competence, leadership skills, and social perspective taking [13], [15], [17].

Why is *authoritative* parenting conducive for *adaptive* cognitive emotion regulation in children? As discussed earlier in this paper, *authoritative* parents set reasonable demands on and have high expectations for their children while being warm and responsive. As parents give them chance to explore the event, they can analyze and handle the situation more efficiently, and approach forward to reach the goals. They can develop thoughts to give a positive meaning even to the negative and stressful events. Baumrind [14] explains that *authoritative* parents openly discuss the problems or actions that may arise in relation to the child and exhibit firm control when necessary. *Authoritative* parents aim to teach rules of conduct, outline boundaries, foster responsibility through teaching correct principles, and employ consequences for problematic behavior, but employ more positive reinforcement (e.g., compliments) than harsh punishment (e.g., spanking). This parenting style offers a balance between high nurturance and high control, in addition to clear communication about expectations for the child [13]. *Authoritative* parents do not reward dependency [13], but instead set a standard of responsibility and self-control. Thus *authoritative* parenting can have profound effects on the child's ability to cope with life challenges, leading to the development of proper cognitive emotion regulation.

B. Authoritarian Parenting Leads to Less Adaptive Cognitive Emotion Regulation in Children

As shown in Table II, *authoritarian* parenting is the strongest predictor of *less adaptive* cognitive emotion regulation in children. Results indicate that a change of 1 standard deviation in *authoritarian* parenting resulted in a change of .294 standard deviations in *less adaptive* cognitive emotion regulation. The positive association of *authoritarian* parenting with *less adaptive* cognitive emotion regulation indicates that children of *authoritarian* parents always emphasize their thoughts of negative aspects of the situation. For example, they can continually think how horrible the situation was. They are also more likely to blame themselves for the (negative) situation (even if they were not responsible for it). Consistent with these findings past studies have shown that *authoritarian* parenting is positively associated with the child's negative outcomes [19], [20] and negatively with the positive outcomes such as self-esteem [33].

Why does *authoritarian* parenting lead to *less adaptive* cognitive emotion regulation in children? As discussed earlier in this paper, *authoritarian* parents allow for strong parental command over their child, leaving minimal input of the child in decisions [15]. Measures of coercive and punitive control, such as physical or emotional punishment, are often used by *authoritarian* parents as a means of disciplining the child. *Authoritarian* parents are obedience- and status-oriented, and expect their orders to be obeyed without explanation [15]. They are demanding and unresponsive to the emotional needs of the child, as well as being controlling, detached and unsupportive [13]. Thus offering one-way style of parenting *authoritarian* parents might block the development of emotion

regulation in adaptive manner, increasing the likelihood that the child will be less adaptive in interaction with the surroundings.

C. Permissive Parenting has no Impact on Children's Cognitive Emotion Regulation

The study revealed that *permissive/indulgent* parenting has no contribution in children's cognitive emotion regulation. As *permissive* parents exhibit high levels of warmth and low levels of control, children of these parents become neither *adaptive* nor *less adaptive* in emotional setting. Research has shown that children of *permissive* parents get inconsistent and confusing guidelines or no outlines of the boundaries in their environment [13]. Under such parenting, little is required of children, especially in the areas of maturity and responsibility [15]. Also, *permissive* parents often surrender to the demands of their child. Bad behavior of the child is seldom corrected by parents and rules are not enforced or clearly communicated. According to Baumrind [11], children of *permissive* parents are often left to regulate their own activities, behavior, and emotions at a young age. Thus *permissive* parents fail to determine the strategies children will employ in controlling their emotions.

D. Type of Family has no Impact on Children's Cognitive Emotion Regulation

The study also showed that children's cognitive emotion regulation is not associated with the type of family they are raised in. This is interesting, however; it does not exclude the importance of the family in a child's life. Family is the first and foremost important psychosocial setting for every child. According to Karim, Islam, and Seraj [34], to know the future of a society one should look into the ways in which the children are raised, but not into the family structure. As the difference in family structure did not produce any difference in children's cognitive emotion regulation in this study, we give more importance on quality parenting over family structure, suggesting that all parents should be trained on good parenting rather than family structure. However, there are studies demonstrating that family type can facilitate or limit the ways in which parents are able to positively influence the outcomes of their children [35]-[37]. But, in those studies the concept of family type was different from what we mean by family type in the present study. As demonstrated by Amato [35], for example, children coming from divorced families have more difficulties in school, more behavior problems, more negative self-concept and more trouble getting along with their parents. Children with divorced parents continued to score significantly lower on measures of academic achievement, conduct behavior, psychological adjustment, self-concept and social relations [36]. Children who live with a single mother family fare poorly across a wide range of adolescent and adult outcomes, including educational attainment, economic security and physical and psychological well-being [37]. Thus whether family type is important for the child's emotional or other psychosocial development depends

on how it is defined. A family type just defined by the number of people living together is not important at all.

E. Gender Equality Exists in Cognitive Emotion Regulation of Children

Another interesting demonstration of this study is that children's cognitive emotion regulation strategy does not vary with gender. This is inconsistent with the findings in other cultures [38]-[40]. In American culture, for example, women reported utilizing rumination and putting into perspective in stressful situation more than men whereas men reported blaming others more than women [38]. In another study, American women scored higher on rumination, catastrophizing, positive refocusing, refocusing on planning and positive reappraisal whereas American men scored higher on blaming others [39]. Likewise, Dutch women reported to use rumination, catastrophizing and positive refocusing more often than Dutch men [40]. The findings of the present study possibly reflect cultural differences suggesting that gender is not important in a collectivistic society to determine which strategies adolescents will employ to control their emotions. Instead, the crucial factor is the experience they receive in their family, i.e., how they are reared up by their parents and other family members. Nowadays, parents in Bangladesh are conscious enough to deal with the male and female children alike, thus promoting no difference in emotion regulation between the male and female children.

In summary, the study demonstrated that the style of parenting determines the cognitive strategies children will employ to regulate their emotions. Of the three types of parenting, *authoritative* parenting was the best for children's *adaptive* cognitive emotion regulation, and *authoritarian* for *less adaptive* cognitive emotion regulation. *Permissive* parenting has no impact on children's cognitive emotion regulation. Type of family or child's gender has also nothing to do with such functioning. It can, therefore, be concluded that good parenting style as characterized by parental warmth, acceptance, and readiness for childhood needs and proper control is crucial for effective emotion regulation at adolescent period and to handle the problems skillfully.

V. LIMITATIONS AND IMPLICATIONS

In addition with a number of interesting findings, the present study offers some inconsistent results. For example, *authoritarian* parenting contributes significantly both in *adaptive* and *less adaptive* cognitive emotion regulations. This was unexpected and cannot be explained by the present data. The study has also some inherent limitations such as it cannot explain a large proportion of the variance in children's cognitive emotion regulation. Further research on large scale sample from different parts of Bangladesh will possibly exclude the inconsistency. To exclude the limitation, future research can include a large number of predictors such as school influences, socio-economic factors, parents' marital adjustment, maternal depression, step families, working parents, sibling relationships, and religion etc.

Despite the above limitations, the present findings will have implications for research and practice. The findings will guide to generate new researches in family matters, parental practices and adolescents' outcomes using a wide range of variables. For practice, the study provides important information about the good parenting need in adolescence. Adolescence is a very sensitive age, when guidance and proper press of their emotion and emotion regulation must go together with affection, support, and freedom. The findings will be helpful for parents, caregivers, child psychologists, and other professionals working with children or adolescents for guiding them to become resources of the country.

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