

A Correlational Approach to Relational Aggression: Assessing Individual, Family and Classroom Variables/Determinants of Relational Aggression among Adolescents

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The present study examined the prevalence and correlates in experiencing and perpetrating relational aggression in the context of adolescents' perceived parental relationship and friendships at academic setting. A sample (N=400) consisted of adolescents (n=200 boys and n=200 girls) was selected through stratified sampling from public and private schools and colleges. Multiple statistical analyses indicated the relationship and determinants/correlates of relational aggression including age, gender, class, parental rearing styles, parental education, number of siblings, family system, private/public academic institutes, and social support at school/college setting. The results would help in identification, intervention and prevention of relational aggression's perpetration and victimization at multi-cultural settings including educational, counseling, social and scientific research.

Keywords: Adolescents, relational aggression, relational victimization, social support, family dynamic, classroom setting

Relational Aggression (RA), according to American Psychological Association, is defined as behavior that manipulates or damages relationships between individuals or groups, such as bullying, gossiping, and humiliation (APA, 2022). Examples include isolating youth from their socializing circle (social exclusion/ostracizing), silent treatment, spreading rumors/gossips (peer rejection), passive-aggressive behavior, microaggression and manipulation like emotional/psychological warfare from reactive to instrumental relational aggression. To study the complexity of relational aggression is even more imperative because first, as relational aggression is consistently linked with various emotional-behavioral problems both in aggressor and victim especially in educational setup. Secondly, relational aggression is mistakenly dismissed as less detrimental than physical aggression amongst parents, teachers and academic body. Besides, academic officials are less likely to intervene in situations involving relational aggression than physical aggression (Waasdorp et al., 2022). This study would provide a prospect of insight to students, parents and academic body in understanding these factors.

Identification of relational aggression and victimization in the academic setting can be a daunting task. For instance, relationally aggressive perpetrators could assert that gossiping/ignoring someone is not against the rules. Educators, much like society, tend to perceive relationally aggressive behaviors as 'just the way students are' which is similar to the adage 'boys will be boys and girls will be girls' as a justification. Adolescence is a period characterized by increased needs for independence by change in cognitive and social domain that results in more frequent use of RA. Friendships become more intense and exclusive in more intimate disclosures and with developed cognitive abilities become more engaged

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towards covert and manipulative behaviors that fall under RA (Yoon et al., 2004). Moreover, RA is believed to escalate more in early and late adolescence period (Mukhtar & Mahmood, 2018; Nixon & Werner, 2010). Relationally aggressive youth create conflict for their friends' interpersonal relationships when their friends don't comply in accordance with an adolescent's demands. Therefore, the support and friendship within peer interaction become manipulative and conditional.

Not only peer interaction but many researches assessed the role of parenting in adolescence have paid much attention to the way in which parents influence adolescents' interactions and their relationships with their peers. This attention does not seem surprising, given the central role of peer relationships in adolescent's psychological, school, and social adjustment (Mukhtar & Mahmood, 2018). Positive peer relationships bolster healthy adjustment; conversely, significant number of adolescent's experience difficulties with their peers (Waldrip, et al., 2008). Further, it is likely that effects of parenting on adolescent's social adjustment occur through modeling of behavior during social interactions. The influence of home environment has deep effects on children, as parents who engage in deviant behaviors have higher likelihood of their children's displaying deviant behavior. With the concurrent and subsequently damaging effects related with involvement in RA, it is vital to investigate antecedents of engaging in RA (Crick, et al., 2006).

Adolescence is a period when peer group is mostly susceptible of external influence. Recent researches proposed that in addition to familial functioning and peer relationships are influential in the exhibition of RA for adolescents (Gorman-Smith, et al., 2004; Mukhtar, 2019). It showed where RA peers was located in the school social networks or in popular hierarchy. Also this indicated that social status/popularity was associated with the exhibition of RA, along with community factors also involved as influential predictors. Age difference and perceived social support researches investigated that younger children depend on their parents for social support while older adolescents on their friends to seek social support (Rose, et al., 2004).

Adolescents are social beings who seek and appreciate other's acknowledgment and support. For instance, children seek the feeling of acceptance and pride of significant others and their development is greatly influence by it (Miller, 2011). Social support from parents, peers and teachers help them reduce negative of any possible situation (Mukhtar & Mahmood, 2018; Rothern, et al., 2011). High level of family support evidenced as an important element in promoting mental health of adolescents (Rothern, et al., 2011). Family support can reduce adolescent's emotional and behavioral problems and protect victims of any form of aggression from maladjustment (Yeung & Leadbeater, 2010).

Other than peer and parental interactions gender also plays a role in RA. As, values and societal expectations for each gender differ across cultures. Yet, a gender gap of women being more relationally aggressive and men being more physically aggressive is recognized across cultures especially in Asian cultures (French, et al., 2002; Kikas, et al., 2009). Researchers suggested that girls are more likely to display RA behaviors, while boys are more likely to exhibit physically aggressive behaviors (Cullerton-Sen & Crick, 2005). Gender specific research indicated that relational and overt aggression initiates in early childhood but become more intense during adolescence (Crick, et al., 2006).

As previous researches linking relational aggression has studied the association of relation aggression with gender (Bowie, 2007), adolescent girls (Crothers et al., 2005), antecedents of relational aggression (Coyne, et al., 2010; Mukhtar & Mahmood, 2018),

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addressed both the perpetrators and victim within the adolescent group (Gomes, 2007) and has identified methods of relationally aggressing youth (Crothers et al., 2005; Mukhtar, 2019). However, very little research has addressed the interplay of interactive correlative factors impacting relational aggression on pertaining individuals. In the light of the above mentioned discussion the current research aims to investigate the correlates of relational aggression in the context of adolescents' perceived parental relationship and friendships in academic setting.

Research objectives

Following are the research objectives of the current study:

- To investigate the correlates in experiencing and perpetrating relational aggression in the context of adolescents' perceived parental relationship and friendships at academic setting
- To identify the perceived parenting styles, perceived social support and relational aggression across gender
- To investigate the relationship of demographic variables with perceived parenting styles, perceived social support and relational aggression in adolescents

Method

Research Design

Correlational research design was employed to investigate the correlates of relational aggression in the context of adolescents' perceived parental relationship and friendships in academic setting.

Participants

The sample was composed of 400 adolescents from public and private schools ($n=100$ girls: $n=100$ boys). Data was collected through stratified sampling technique and the sample size was calculated through G-Power analysis. Only those adolescents were included whose both parents were alive and were residing with them. The details of the participants are given below in the table.

Table 1*Percentages and Frequencies of the Demographics Properties of the Participants (N=400)*

Demographic Variables	Boys <i>f (%)</i>	Girls <i>f (%)</i>	Total <i>f (%)</i>
Gender	200 (50)	200 (50)	400 (100)
Age (Groups)			
12-15	87 (43.5)	102 (51)	189 (47)
16+	113 (56.5)	98 (49)	211 (53)
Class			
9 th	50 (25)	50 (25)	100 (25)
10 th	50 (25)	50 (25)	100 (25)
1 st year	50 (25)	50 (25)	100 (25)
2 nd year	50 (25)	50 (25)	100 (25)
School/College			
School	100 (50)	100 (50)	200 (50)
College	100 (50)	100 (50)	200 (50)
Private/Public			
Private	100 (50)	100 (50)	200 (50)
Public	100 (50)	100 (50)	200 (50)
No. of Siblings			
0-6	194 (97)	195 (97.5)	389 (97)
7+	6 (3)	5 (2.5)	11 (3)
Father's Education (years)			
0-6	73 (36.5)	40 (20)	113 (28)
7-13	75 (37.5)	74 (37)	149 (37)
14+	52 (26)	86 (43)	138 (35)
Mother's Education (years)			
0-6	94 (47)	43 (21.5)	137 (34)
7-13	61 (30.5)	82 (41)	143 (36)
14+	45 (22.5)	75 (37.5)	120 (30)
Family System			
Nuclear	118 (59)	140 (70)	258 (65)
Joint	82 (41)	60 (30)	142 (35)

The above mentioned table indicated that details of the participants regarding various demographic variables.

Measures

Following are the measures used in the current study:

Diverse Adolescent Relational Aggression Scale.

The Diverse Adolescent Relational Aggression Scale (DARAS; Horton, 2010) for adolescents of age 14-19 years consisted of 28 items that were used to assess relational aggression among friends. All items are positively worded to describe relationally aggressive behaviors and influences (i.e., *It is okay to talk about someone behind their back*). Items were scored on a 4-point Likert scale 1= *Strongly Disagree* to 4= *Strongly Agree*. It has high internal consistency with Cronbach's alpha (α) coefficient of .78.

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Demographic Performa.

A demographic perform based on the research literature was devised to gather demographics information including participant's age, gender, class, parental rearing styles, parental education, number of siblings, family system, private/public academic institutes, and social support at school/college setting.

Early Memories of Upbringing for Children (EMBU-C).

The modified version of the EMBU-C consists of 39 items allocated in four subscales each representing domains of parental rearing practice based on youth's perception of their rearing practices was used. All items are answer to a 4 point Likert scale. For each EMBU-C items, children first assessed father's rearing behavior and then mother's rearing behavior. The scale contained 4 factors as emotional warmth, rejection, overprotection and anxious rearing. Reliability for the all items in the scale was (α) .66 to .81 (Castro, et al., 1993).

Social Support Questionnaire (SSQ).

It was used to assess perceived social support (Sarason, et al., 1987). It measures different aspects of social support and yield two score. The perceived social support (subjectively rated adequacy of support) score is the total number of individuals named by the participants as available for support in a variety of specified situations. The satisfaction on the perceived social support is the degree of satisfaction (on a six point scale) with the perceived support. Reliability for the all items in the scale was (α) alpha=0.89.

Procedure

After receiving the permission for the study from the University of Management and Technology's Institutional Review Board, and respective schools and colleges, participants were approached with a packet consists of questionnaires and informed consent. For the purpose of data collection, different schools and college were contacted and the permission from the authorities was acquired. Out of 8 private schools and college and 6 public schools and colleges, four schools and colleges complied to work with their students. Each school and college's authorities were briefly explained about the purpose of research; its aims and objectives along with its duration of testing and maintenance of privacy and confidentiality. Verbal instructions were delivered for the final protocol and administered on the group of class. They were requested not to leave any statement unmarked. Participants were ensured about privacy, confidentiality and anonymity of their data. Data were analyzed through the IBM SPSS Statistics 21.0.

Results

The data analysis was done through the establishment of psychometric properties of the measures then Pearson moment correlation, independent sample *t*-test and one way and two way analyses of variance (*ANOVA*) were used to attain the objectives of the study.

Table 2

Total Number of Items, Mean, Standard Deviation and Cronbach's Alpha of the Study Variables (N=400)

Scales	No. of Items	<i>M</i>	<i>SD</i>	α
EMBU-C Father				
Overprotection	10	22.51	5.04	.63
Emotional Warmth	10	30.88	6.07	.83
Rejection	09	13.65	4.52	.80
Anxious Rearing	10	29.60	4.98	.69
EMBU-C Mother				
Overprotection	10	25.45	5.74	.75
Emotional Warmth	10	31.03	6.14	.84
Rejection	09	15.16	5.17	.82
Anxious Rearing	10	30.66	5.01	.73
Social Support	7	8.40	3.0	.84
Social Support Satisfaction	7	4.71	1.18	.91
Relational Aggression	28	72.31	9.15	.76

The above table showed that all scales and subscales are reliable. Cronbach's Alpha on factor by factor and on total number of items are showing high internal consistency of scale. It also showed that every sub-scale of the scale is closely related to each other.

Table 3

Inter-Correlations, Means and Standard Deviation of Parenting Styles, Social Support and Relation Aggression in Adolescents (N=400)

Factors	1	2	3	4	5	6	7	8	9	10	11
1.OF	-	.23***	.13*	.51***	.47***	.18***	.07	.33***	-.03	.04	-.10*
2.EWF		-	-.57***	.33***	-.08	.50***	-.30***	.17***	-.08	.17***	-.33***
3.RF			-	-.07	.25***	-.26***	.52***	.07	.10	-.06	.25***
4.ARF				-	.29***	.32***	-.12*	.58***	-.11*	.08	-.20***
5.OM					-	.03	.36***	.45***	.05	-.06	.15**
6.EWM						-	-.56***	.47***	-.13**	.16**	-.27***
7.RM							-	-.08	.20**	-.12*	.30**
8.ARM								-	-.03	.09	-.05
9.PSS									-	.03	.17***
10.PSSA										-	-.09
11.RAG											-

Note. OF= Overprotection Father, EWF= Overprotection Father, RF= Rejection Father, ARF= Anxious Rearing Father, OM= Overprotection Mother, EMW= Emotional Warmth Mother, RM= Rejection Mother, ARM= Anxious Rearing Mother, PSS= Perceived Social Support, PSSA= Perceived Social Support Satisfaction, RAG= Relation Aggression

*df= 400, *** $p < .001$, ** $p < .01$, * $p < .05$*

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Results have showed very high significant inter-factor correlation in EMBU-C mother and father's factors. The table has shown high negative correlation of EMBU-C factor of Overprotection father with relational aggression. Factor Emotional Warmth of father has high positive correlation with Social Support Satisfaction. Emotional Warmth of father has very high negative correlation with relational aggression. Rejection of father has very high positive correlation with relational aggression. Anxious Rearing father has high negative correlation with Social Support and very high negative correlation with relational aggression.

The results indicated high positive correlation of EMBU-C factor of Overprotection of mother with relational aggression. Emotional Warmth of mother has very high negative correlation with Social Support and with relational aggression as well. Also Emotional Warmth of mother has high positive correlation with Social Support Satisfaction. Factor Rejection has shown very high positive correlation with Social Support and with relational aggression as well. Also it has shown the high negative correlation with Social Support Satisfaction. Results also indicated that the Social Support has high positive correlation with relational aggression.

Table 6

Means, Standard Deviations, t and p values of Boys (n=200) & Girls (n=200) on Parenting Styles, Social Support and Relational Aggression

Factors	Gender	M	SD	t	P	95% CI		Cohen's d
						LL	UL	
Overprotection-F	Boys	23.28	4.84	3.06	.002	.55	2.51	0.31
	Girls	21.75	5.14					
Emotional Warmth-F	Boys	30.25	6.33	2.08	.038	-2.45	-.07	0.21
	Girls	31.51	5.75					
Rejection-F	Boys	14.28	4.86	2.78	.006	.36	2.13	0.28
	Girls	13.03	4.08					
Anxious Rearing-F	Boys	30.24	4.64	2.59	.010	.31	2.25	0.26
	Girls	28.96	5.24					
Overprotection-M	Boys	25.58	5.43	.45	.651	-.87	1.39	-
	Girls	25.32	6.05					
Emotional Warmth-M	Boys	30.80	5.56	.75	.455	-1.67	.75	-
	Girls	31.26	6.68					
Rejection-M	Boys	15.15	4.90	.07	.946	-1.05	.98	-
	Girls	15.18	5.46					
Anxious Rearing-M	Boys	31.34	4.83	2.76	.006**	.39	2.35	0.28
	Girls	29.97	5.11					
Social Support	Boys	8.24	3.15	1.03	.302	-.90	.28	-
	Girls	8.55	2.85					
SSA	Boys	4.68	1.17	.67	.519	-.31	.16	-
	Girls	4.75	1.20					
Relational Aggression	Boys	73.07	8.56	1.65	.10	-.29	3.30	-
	Girls	71.56	9.67					

Note. SSA=Social Support Satisfaction $df=398$

According to the results boys perceived more fathers' Overprotection, Rejection and Anxious Rearing as compared to girls. While girls has more Emotional Warmth of father as compared to boys. Results indicated that there was a significant difference between mothers' parenting styles between boys and girls. Boys perceived more mothers' Anxious Rearing as compared to girls whereas no significant difference was found in mothers' Overprotection, Emotional Warmth and Rejection factors between boys and girls. No significant gender difference was found in Social Support, Social Support Satisfaction and relational aggression across gender.

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Table 7

Means, Standard Deviations, t & p values of Age Categories of 12-15 (n=189) & 16 or Above Years Old (n=211) on Parenting Styles, Social Support and Relational Aggression

Factors	Age	M	SD	t	p	95% CI		Cohen's d
						LL	UL	
Overprotection-F	12-15	22.54	5.01	.10	.91	-0.94	1.05	-
	16+	22.49	5.08					
Emotional Warmth-F	12-15	32.39	4.80	4.93	.00	1.72	4.01	0.50
	16+	29.52	6.75					
Rejection-F	12-15	13.16	3.96	2.10	.03	-1.81	-0.06	0.20
	16+	14.09	4.94					
Anxious Rearing-F	12-15	29.98	4.75	1.46	.14	-0.25	1.71	-
	16+	29.25	5.17					
Overprotection-M	12-15	25.20	5.94	.82	.41	-1.60	.66	-
	16+	25.67	5.56					
Emotional Warmth-M	12-15	31.66	5.72	1.97	.05	-0.00	2.39	.20
	16+	30.46	6.46					
Rejection-M	12-15	14.76	4.88	1.50	.13	-1.78	.24	-
	16+	15.53	5.41					
Anxious Rearing-M	12-15	30.89	4.85	.88	.37	-0.54	1.43	-
	16+	30.45	5.15					
Social Support	12-15	7.93	2.64	3.02	.00	-1.47	-0.31	.30
	16+	8.82	3.24					
SSA	12-15	4.87	1.15	2.53	.01	.07	.53	.26
	16+	4.57	1.19					
Relational Aggression	12-15	70.31	9.06	4.24	.00	-5.57	-2.04	.42
	16+	74.11	8.88					

Note. SSA= Social Support Satisfaction *df*=398

The above table indicated that there was a significant difference between fathers' parenting styles between two age groups of adolescents. According to the results, the older age group of adolescents perceived more Emotional Warmth and Rejection of father than the younger group of adolescents. No significant difference was found in Overprotection and Anxious Rearing in young and old age group of adolescents. Results indicated that there was a significant difference between mothers' parenting styles between two age groups of adolescents. According to the results, the younger age group of adolescents perceived more Emotional Warmth of mother than the older group of adolescents. No significant difference was found in Overprotection, Rejection and Anxious Rearing in young and old age group of adolescents. Results also indicated significant difference on Social Support and Social Support Satisfaction across age groups. The old age group of adolescents reported more Social Support than young age group of adolescents. Further, the young age group of adolescents reported more Social Support Satisfaction than old age group of adolescents. The table also indicated significant difference on relational aggression across age groups. The old age group of adolescents reported high on relational aggression than young age group of adolescents.

Table 8

Means, Standard Deviations, t and p values of No of Siblings' Categories of 0-6 (n=389) and 7or more (n=11) on Parenting Styles, Social Support and Relational Aggression

Factors	No of Siblings	M	SD	t	p	95% CI		Cohen's d
						LL	UL	
Overprotection-F	0 - 6	22.47	5.04	.99	.32	-4.56	1.50	-
	7+	24.00	4.90					
Emotional Warmth-F	0 - 6	30.88	6.09	.18	.85	-3.32	3.99	.-
	7+	30.55	5.73					
Rejection-F	0 - 6	13.70	4.56	2.37	.03	.15	3.44	.49
	7+	11.91	2.39					
Anxious Rearing-F	0 - 6	29.54	4.97	1.38	.16	-5.09	.89	-
	7+	31.64	5.41					
Overprotection-M	0 - 6	25.45	5.74	.15	.87	-3.19	3.73	.-
	7+	25.18	6.11					
Emotional Warmth-M	0 - 6	30.98	6.17	.98	.32	-5.53	1.85	-
	7+	32.82	5.00					
Rejection-M	0 - 6	15.25	5.21	2.00	.04	.06	6.26	.81
	7+	12.09	1.76					
Anxious Rearing-M	0 - 6	30.60	5.02	1.21	.22	-4.86	1.16	-
	7+	32.45	4.63					
Social Support	0 - 6	8.43	2.96	1.57	.11	-.37	3.24	-
	7+	7.00	4.22					
Social Support Satisfaction	0 - 6	4.72	1.16	.55	.59	-.93	1.55	-
	7+	4.42	1.84					
Relational Aggression	0 - 6	72.36	9.24	.61	.53	-3.78	7.23	-
	7+	70.64	5.39					

Note. df=398

The above table indicated that there was a significant difference between Fathers' parenting styles between two family groups of adolescents. The larger family groups perceived more Rejection of father than the smaller family group of adolescents. No significant difference was found in Overprotection, Emotional Warmth, and Anxious Rearing factors of two family groups. Results indicated that there was a significant difference between Mothers' parenting styles between two family groups of adolescents. The larger family group perceived more Rejection of mother than the smaller family group of adolescents. No significant difference was found in Overprotection, Emotional Warmth, and Anxious Rearing factors of two family groups. No significant difference was found in Social Support, Social Support Satisfaction and relational aggression across family size.

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Table 9

Means, Standard Deviations, t and p values of Family System Categories Nuclear (n=258) and Joint Family System (n=142) on Parenting Styles, Social Support and Relational Aggression

Factors	Family System	M	SD	t	p	95% CI		Cohen's d
						LL	UL	
Overprotection-F	Nuclear	21.84	5.02	3.65	.00	-2.91	-.87	.38
	Joint	23.73	4.85					
Emotional Warmth-F	Nuclear	30.69	6.08	.80	.42	-1.76	.74	-
	Joint	31.20	6.06					
Rejection-F	Nuclear	13.44	4.36	1.28	.20	-1.53	.32	-
	Joint	14.04	4.79					
Anxious Rearing-F	Nuclear	29.24	5.04	1.93	.05	-2.00	.02	.20
	Joint	30.23	4.83					
Overprotection-M	Nuclear	24.64	5.61	3.83	.00	-3.42	-1.10	.40
	Joint	26.90	5.71					
Emotional Warmth-M	Nuclear	30.94	6.36	.39	.69	-1.51	1.02	-
	Joint	31.19	5.75					
Rejection-M	Nuclear	15.08	5.15	.42	.67	-1.29	.84	-
	Joint	15.31	5.24					
Anxious Rearing-M	Nuclear	30.27	5.05	2.09	.03	-2.12	-.07	.22
	Joint	31.36	4.88					
Social Support	Nuclear	8.48	2.91	.80	.42	-.36	.87	-
	Joint	8.23	3.16					
Social Support Satisfaction	Nuclear	4.75	1.13	.93	.35	-.13	.36	-
	Joint	4.64	1.28					
Relational Aggression	Nuclear	72.36	8.67	.125	.90	-1.84	2.09	-
	Joint	72.23	9.99					

Note. df=398, ***p<.001, *p<.05, ns=non-significant

The results indicated significant difference on Father's parenting styles between two family systems of adolescents. Adolescents of joint family system perceived more fathers' Overprotection and Anxious Rearing than joint family system. No significant difference was found in father's Emotional Warmth and Rejection factors of two family systems. The table indicated that there was a significant difference between Mothers' parenting styles between two age groups of adolescents. Adolescents of joint family system perceived more Overprotection and Anxious Rearing of mother than nuclear family system. No significant difference was found in Rejection and Emotional Warmth mother's factors in two family systems. No significant difference was found in Social Support, Social Support Satisfaction and relational aggression across family system.

Table 10

Means, Standard Deviations, t and p values of School/College Categories of School (n=200) and College (n=200) on Parenting Styles, Social Support and Relational Aggression

Factors	School/College	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	95% CI		Cohen's <i>d</i>
						LL	UL	
Overprotection-F	School	22.66	4.89	.59	.55	-.70	1.29	-
	College	22.37	5.19					
Emotional Warmth-F	School	32.26	4.95	4.68	.00	1.61	3.93	.47
	College	29.49	6.75					
Rejection-F	School	13.32	3.96	1.47	.14	-1.55	.22	-
	College	13.99	5.01					
Anxious Rearing-F	School	30.26	4.64	2.67	.00	.35	2.29	.27
	College	28.94	5.24					
Overprotection-M	School	25.30	5.76	.52	.60	-1.43	.83	-
	College	25.60	5.73					
Emotional Warmth-M	School	31.69	5.37	2.16	.03	.12	2.52	.22
	College	30.37	6.78					
Rejection-M	School	14.69	4.70	1.85	.07	-1.97	.06	-
	College	15.64	5.58					
Anxious Rearing-M	School	30.98	4.75	1.28	.20	-.35	1.63	-
	College	30.34	5.25					
Social Support	School	7.83	2.72	3.87	.001	-1.72	-.56	.39
	College	8.97	3.16					
Social Support Satisfaction	School	4.86	1.15	2.57	.01	.07	.53	.26
	College	4.56	1.20					
Relational Aggression	School	70.48	8.70	4.08	.001	-5.43	-1.90	.40
	College	74.15	9.24					

Note. *df*=398

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The above table indicated that there was a significant difference between Fathers' parenting styles between two categories of educational institutions. School adolescents' perceived more fathers' Emotional Warmth and Anxious Rearing than college adolescents. No significant difference was found in Overprotection and Rejection in school and college group of adolescents. The result table indicated that there was a significant difference between Mothers' parenting styles between two categories of educational institutions. School adolescents' perceived more mother's Emotional Warmth than college adolescents. No significant difference was found in Overprotection, Rejection and Anxious Rearing in school and college group of adolescents.

The table indicated significant difference on Social Support and Social Support Satisfaction in school and colleges. College adolescents reported more Social Support than school adolescents. School adolescents reported more Social Support Satisfaction than school adolescents. Results indicated significant difference on relational aggression across educational institutions. Adolescents of college reported high on relational aggression than school adolescents.

Table 11

Means, Standard Deviations, t and p values of Institute Level Categories of Private (n=200) and Public (n=200) on Parenting Styles, Social Support and Relational Aggression

Factors	Institute Level	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>	95% CI		Cohen's <i>d</i>
						LL	UL	
Overprotection-F	Private	22.58	5.08	.27	.78	-.86	1.13	-
	Public	22.45	5.01					
Emotional Warmth-F	Private	30.41	6.65	1.53	.12	-2.12	.26	-
	Public	31.34	5.42					
Rejection-F	Private	14.14	5.26	2.17	.03	.09	1.86	.22
	Public	13.17	3.58					
Anxious Rearing-F	Private	28.87	5.32	2.96	.00	-2.43	-.49	.30
	Public	30.33	4.53					
Overprotection-M	Private	26.33	5.96	3.10	.00	.64	2.88	.30
	Public	24.57	5.39					
Emotional Warmth-M	Private	30.12	6.92	2.99	.00	-3.02	-.62	.30
	Public	31.94	5.11					
Rejection-M	Private	16.52	5.54	5.43	.00	1.73	3.70	.54
	Public	13.81	4.39					
Anxious Rearing-M	Private	30.34	5.41	1.26	.20	-1.62	.36	-
	Public	30.97	4.57					
Social Support	Private	9.01	2.99	4.15	.00	.64	1.80	.41
	Public	7.79	2.90					
Social Support Satisfaction	Private	4.56	1.18	2.70	.00	-.55	-.09	.26
	Public	4.87	1.16					
Relational Aggression	Private	73.54	9.77	2.70	.00	.67	4.24	.27
	Public	71.09	8.34					

Note. df=398

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The above table indicated a significant difference between Fathers' parenting styles between two categories of educational institution's levels. Private educational level's adolescents' perceived more Rejection than public. Public educational level's adolescents perceived more Anxious Rearing than private. No significant difference was found in Overprotection, and Emotional Warmth factors in private and public educational level's adolescents. Results indicated significant difference between Mothers' parenting styles and educational institution's levels. Private educational level's adolescents' perceived more Overprotection and Rejection than public. Public educational level's adolescents perceived more Emotional Warmth than private. No significant difference was found in Overprotection and Emotional Warmth factors.

The table indicated significant difference on Social Support and Social Support Satisfaction in private and public educational levels. Private educational level's adolescents reported more Social Support than public. Public educational level's adolescents reported more Social Support Satisfaction than private. Adolescents of private educational level reported high on relational aggression than public. One way analysis was carried out in order to see the difference of groups of four classes on EMBU-C's parental factors, social support and relational aggression.

Table 12

One Way Analysis of Variance of Four Levels of Class (9th, 10th, 1st and 2nd year) on Parenting Styles, Social Support and Relational Aggression

Factors	Class								F	p
	9 th (n=100)		10 th (n=100)		1 st Year (n=100)		2 nd Year (n=100)			
	M	SD	M	SD	M	SD	M	SD		
Overprotection-F	22.60	5.03	22.72	4.77	22.95	5.48	21.78	4.84	1.02	.38
Emotional Warmth-F	32.73	4.35	31.79	5.47	30.54	5.62	28.44	7.60	9.96	.00
Rejection-F	12.82	3.34	13.82	4.46	13.60	3.75	14.37	6.01	2.04	.10
Anxious Rearing-F	29.94	4.41	30.57	4.86	29.74	4.86	28.13	5.49	4.46	.00
Overprotection-M	25.13	5.90	25.46	5.65	25.88	5.80	25.31	5.68	.31	.81
Emotional Warmth-M	31.97	5.04	31.41	5.68	31.39	5.24	29.35	7.94	3.58	.01
Rejection-M	14.61	5.10	14.76	4.29	16.15	5.49	15.13	5.64	1.81	.14
Anxious Rearing-M	31.22	4.09	30.73	5.34	31.25	4.86	29.42	5.49	2.97	.03
Social Support	8.11	2.76	7.54	2.66	8.47	3.14	9.46	3.10	7.59	.00
Social Support Satisfaction	4.75	1.13	4.97	1.16	4.58	1.13	4.54	1.26	2.80	.03
Relational Aggression	70.21	8.70	70.75	8.73	73.47	9.53	74.82	8.94	5.98	.00

Note. Between Groups $df=3$, Within Groups $df=396$, Group Total $df=399$

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Result showed the significant differences on class levels with EMBU-C's father's factors Emotional Warmth and Anxious Rearing. Post Hoc comparison using the Tukey test indicated that in the Emotional Warmth of father's factor, students of 9th class group has difference with 1st year and 2nd year group while there was a difference between 10th class group and 2nd year group. Also from the mean values it was indicated that 9th class students perceived more Emotional Warmth than overall 10th, 1st and 2nd year students. Results indicated that 10th class students perceived more Anxious Rearing than 9th, 1st and 2nd year students. Results also indicated that Father's parenting styles Anxious Rearing decreased simultaneously with the progression of classes and it can also be connected that school going students more Emotional Warmth from father. Results indicated that 9th class students more Emotional Warmth than 10th, 1st and 2nd year students. Results indicated that 1st year students more Anxious Rearing than 9th, 10th class and 2nd year students. It also showed that Mother's parenting style Anxious Rearing increased simultaneously with the progression of classes and it can also be connected that school going students more Emotional Warmth from mother.

The table indicated that 2nd year students more Social Support than 9th, 10th and 1st year students. Whereas, 10th class students perceive more Social Support Satisfaction than 9th, 1st year and 2nd year group students. Results also indicated that Social Support increased simultaneously with the progression of classes. It can also be connected with decreased Social Support Satisfaction with the progression of classes. It also showed that relation aggression has high significant difference among class groups. 2nd year class students scored more on relational aggression than 9th, 10th and 1st year students. The results indicated that relational aggression increased simultaneously with the advancement of classes.

Table 13

One Way Analysis of Variance of Three Levels of Parental Education (0-6, 7-13 and 14+) on Parenting Styles, Social Support and Relational Aggression

Factors	Education						F	p
	0-6 (n=113)		7-13 (n=149)		14+ (n=138)			
	M	SD	M	SD	M	SD		
Overprotection-F	22.62	4.67	22.33	5.24	22.62	5.12	.15	.85
Emotional Warmth-F	30.86	5.38	31.15	5.96	30.59	6.71	.29	.74
Rejection-F	13.64	4.43	13.29	3.79	14.06	5.25	1.03	.35
Anxious Rearing-F	29.85	4.77	29.58	5.08	29.40	5.06	.25	.77
Overprotection-M	24.93	5.70	24.90	4.83	26.68	6.58	4.04	.01
Emotional Warmth-M	31.21	5.84	30.71	6.49	31.20	6.08	.29	.74
Rejection-M	14.90	5.44	14.85	4.83	15.84	5.21	1.48	.22
Anxious Rearing-M	31.12	4.86	30.03	4.86	30.86	5.31	1.80	.16
Social Support (father's education)	8.09	2.92	8.40	2.91	8.64	3.14	1.04	.35
Social Support Satisfaction (father's education)	4.62	1.29	4.77	1.13	4.73	1.14	.51	.59
Social Support (mother's education)	8.38	2.96	8.04	2.83	8.83	3.19	2.28	.10
Social Support Satisfaction (mother's education)	4.74	1.20	4.78	1.09	4.61	1.25	.73	.47
Relational Aggression (father's education)	71.75	8.20	71.32	9.24	73.84	9.63	3.04	.04
Relational Aggression (mother's education)	72.81	7.90	71.94	9.67	72.19	9.86	.332	.71

Note. Between Groups $df=2$, Within Groups $df=397$, Group Total $df=399$

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The above table showed that no significant difference was found on the father's educational levels and father's parenting styles. The result indicated a significant difference in three levels of mother's education and mother's Overprotection that higher the education of mother, more the mother's parenting style of Overprotection. It also showed that no significant difference was found on the father's educational levels and sub-scales of social support. No significant difference was found on the mother's educational levels and sub-scales of social support. Results also indicated that relational aggression has significant difference with father's education. The category (14+) of father's years of education has high mean score in relational aggression than other categories (0-6 and 7-13 years). Results indicated that relational aggression increased simultaneously with the higher education of father. It showed that no significant difference was found on the mother's educational levels and relational aggression.

Discussion

The current study was aimed to explore investigate the correlates of relational aggression in the context of adolescents' perceived parental relationship and friendships in academic setting. A biopsychosocial interconnection of factors of relational aggression in the adolescence (biological development, individual), the family dynamic (parental rearing practices, siblings), and the surrounding environment (classroom environment, social support) in relational aggression perpetration and victimization is being discussed here. During adolescence period, relationships become more emotional with intimate sharing as well as their acceptance and social status from peers become more important element of self-identity for an adolescent. As the findings of the present research highlights that relational aggression and determine correlates are very influential factors which affect functioning of adolescents (Moroń & Biolik-Moroń, 2021). In relational aggression, age difference has been also investigated which was linked to prior studies (Mukhtar & Mahmood, 2018; Yoon et al., 2004) that younger adolescents rely on their parents and authority figures for social support while older group of adolescents rely on peer and close friend's social support, henceforth, younger age group perceives more social support's satisfaction while older age of adolescents perceived more social support than satisfaction with that social support.

Relational aggressors are often perceived to have positive social characteristics like rated high friendliness or affiliation (Xie et al., 2002) by their teachers and peers. Another local study by Mukhtar and Mahmood (2019) found that relational aggression has positive correlation with justification of aggression of public college students. This is because, unlike physically aggressive youth, a relationally aggressive peer is more skilled in using manipulation to exert influence in the group as they could have big social groups and could have high social support as present study presented. Also, the present study results are in line with previous research that college girls showed high relational aggression than college boys and public educational level boys showed more relational aggression than girls.

Like present research's findings, previous researches have shown that 15-18 age adolescents reported victims and perpetrator of relational aggression (Mukhtar & Mahmood, 2018; Nixon & Werner, 2010). A theoretical perspective that explains

adolescent's aggression is Social Information Processing (SIP) theory on the importance of social interactions for their influences on relationships and suggests that an adolescent process social cues in a way that influences their behavior in the social environment. With social-cognitive abilities, they better perceive the manipulative but sophisticated methods to withdraw specific relationships. Furthermore, cultural differences with their distinct practices could not be overlooked. Individualistic and collectivistic culture plays a significant role in developing or correcting socio-cultural norms and individual values. In many Asian countries, childhood period extended to adulthood which is considered a part of norm of parenting in numerous cultures which direct the influence of parental values and family dynamics.

Adolescent's gender influences the perception of parenting style of mother and father. In current research, boys perceived more fathers' Overprotection, Rejection and Anxious Rearing than girls who perceived more Emotional Warmth than boys. Boys perceived more mother's Anxious Rearing than girls. Moreover, adolescents have different perception about their mother and father's parenting styles. In this study, girls perceived more emotional warmth of father and boys perceived more anxious rearing from their mother. This is perhaps because girls feel emotional connection to their fathers and mother's care and more concern could be perceived as anxious rearing from boys given the account of collectivistic culture's traditional contexts (Mukhtar & Mahmood, 2019).

Social learning theory explains relational aggression in adolescents as this theory focuses on behaviors learned through modeling. Previous researches suggested children's use of skills and strategies from the parent-child interaction in their relationship with peers (Nixon & Werner, 2010). Therefore, it is possible that child acquire to interact with their peers from their interaction with their parents. And as the present study helped in considering that an adolescent is imitating mother's rejection amongst their peer group in displaying relational aggression. In the social cognitive framework, Bandura focused on parenting that could facilitate social behavior of children through their own styles which could alter children's cognitive and information processing capacities.

The ecological theory is one of the most recognized theories in educational psychology and applicability to the context of relational aggression in adolescent students. This theory is best defined as the interaction and transaction between a student and his/her environment (Allen-Meares, et al., 2000). Environmental conditions consist of family, peers, school, community and mass media. Bronfenbrenner's (1986) ecological-system model, developmental contexts that may bolster or weaken child development comprises of a multifarious system of family, neighborhood, academic setup social and cultural activities. Environmental factors including parenting, social support impact on relational aggression by bolstering the interaction as the current research attempted to shed light on this context.

Another objective of the present research was to explore mean difference across gender. Our findings showed that there is non-significant gender difference in relational aggression in adolescents. Previous literature indicated significant gender difference on relational aggression in children but not among adolescents. Prinstein et al (2001) found non-significant gender difference in relational aggression among relational aggressors

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and victims in their investigated relationship between relational aggression and psychosocial problems among relational aggressors and victims. Boys and girls level of displaying relational aggression remained same in adolescent and adulthood, while it was significantly different across gender in childhood. Given the differences in societal opinions about display of aggression, aggression often differs between cultures, however, a gender of girls being more relationally aggressive and boys being more physically aggressive is often identified across western culture's researches more (French, et al., 2002; Kuppens, et al., 2009). When examining relational aggression between German students, Port Rico and Hungarian cultures, they found to be rated higher by teacher's ratings but no gender difference was found on relational aggression across these cultures (Kikas, et al., 2009) as cultural impact has on expression on relational aggression. In the present study, both boys and girls reported to display relationally aggressive behaviors which could suggest, in the light of earlier theories, that dispositional anger, maladaptive anger regulation, and anger suppression are prevalent. General avoidance motivation and friendship (relational) victimization are risk factors. Moreover, lack of available outlet for anger, inhibitory emotional awareness, lack of emotional regulation and conditional cultural learning could also leads towards relational aggressive behaviors.

Limitations of the study

The sample of the study poses a limitation on generalization as data was only collected around Lahore's schools and colleges, this study could be replicated on a more culturally diverse population of Pakistan's other provinces for the more representative sample of the general population.

Future suggestions and implications

In order to contribute to preventive and reactive interventions to relational aggression at academic institute and at home, it is imperative that further research investigates the protective and risk factors alongside role of support in the psychosocial adjustment of relationally aggressive adolescents. Researchers could use the research framework from the present research to examine the correlates at rural adolescent's sample in determining relational aggression. In educational psychology's setting, the study will help in implementing awareness-based therapeutic programs, emphasizing parenting-focused prevention and intervention programs for the improvement of academic environment. In research and scientific world, this study will provide the basis for the evaluations leading to therapeutic strategies which would ultimately enhance the efficacies of counseling interventions for the adolescents in general community. Moreover, academic institutes could device new plans to raise awareness amongst their students about relational aggression. This study can be valuable in creation of programs of supporting groups to strengthen the bonding between classmates and generate healthy relationships.

Conclusion

The present study explored correlates relational aggression in the context of adolescents' perceived parental relationship and friendships at academic setting. The older age group of adolescents (16+) showed more Relational Aggression than younger

age group (12-15) of adolescents. Adolescents of college showed more Relational Aggression than school adolescents. Private educational level adolescents showed more Relational Aggression than government educational level adolescents. It also indicated the escalation of Relational Aggression with the advancement of classes. Results indicated that school boys showed high Relational Aggression than school girls. However, college girls showed high Relational Aggression than college boys. It also indicated the effect of school and college on Relational Aggression in boys and girls. Girls from private education level showed more Relational Aggression than boys of private educational level. However, boys from government education boys showed more Relational Aggression than girls from government education level. It also indicated the effect of private and government education level on Relational Aggression in boys and girls. The current research findings have academic, educational and counseling implications.

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