



SELF-REGULATION AS MEDIATOR IN PEER RELATIONSHIP, REJECTION SENSITIVITY WITH POSITIVE DEVELOPMENT AMONG ADOLESCENTS

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ABSTRACT

OBJECTIVE: To explore the mediating role of self-regulation in peer relationship, rejection sensitivity and positive development among adolescents.

METHODS: This cross-sectional research was conducted at Department of Psychology from October, 2018 to September, 2019, comprised of two phases. In first phase, Self-Regulation Questionnaire (SRQ), Adolescent Peer Relations Instrument (APRI), Rejection Sensitivity Questionnaire (RSQ), and Positive Youth Development Inventory (PYDI), were translated into Urdu by forward-backward translation method. For pilot-testing, these scales were administered on 130 students and scales were found to be reliable. In second phase, Urdu versions of four instruments were administered to a sample of 608 (males=330, females=278) college students of 1st and 2nd years studying in various colleges of Sara-i-Alamgir by stratified proportionate random sampling technique.

RESULTS: Cronbach alpha reliability of SRQ, APRI, RSQ, and PYDI was found to be 0.710, 0.838, 0.704, and 0.851 respectively in first phase. Mean age of students was 17.6±0.83 years. The hierarchical regression analysis found the mediating role of self-regulation in positive development of adolescents while partial indirect effects for peer relationships (B=.28, p<.01) and full indirect effects for rejection sensitivity (B=.32, p<.001) were found.

CONCLUSION: The positive development in adolescents was enhanced by their self-regulatory strategies as it buffered the impact of negative relationships with the friends such as bullying and victimization. Furthermore, the elements of sensitivity to rejection by peers were softened by their self-regulation and did not hampered their positive development. Implications in the light of the present findings are discussed.

KEYWORDS: Bullying (MeSH); Emotional Regulation (MeSH); Sensitivity (MeSH); Victimization (MeSH); Well-being (Non-MeSH).

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environment in which they lack stability in fulfillments of educational requirements.⁵ This would have led to lack of positive development of adolescents in terms of their social, physical, and psychological well-being. Numerous adjustment issues and peer relationship issues have been found related with rejection.^{6,7} Adolescents who have good peer fellows they have good ability of self-regulation and less negative thinking and less chance of rejection. Rejection sensitivity is an elimination from significant others and isolation from social interaction with others that has a huge negative impact on human being's emotions and behavior.⁸ Adolescents who have not good relationship they have sensitivity to rejection from their peers which can problem for positive development of adolescence. If person have good relationship with their peers, they have good skills of self-regulation and less chances of rejection which can lead the positive development of adolescents. Positive development can be defined as an approach that connect teens to with their peer organizations, families, communities in a way that enhance adolescent's strengths.^{9,10}

On the basis of literature review, it is evident that gap existed in investigation of interaction among self-regulation in peer relationship, rejection sensitivity and positive development in period of adolescence, particularly in Pakistan. Self-regulation in adolescents and early adults is studied in relation to its impact on academic performances in

INTRODUCTION

Self-regulation can be defined as a controlling one's own behavior, emotions and thoughts that produce positive result in ways, acceptable for achievement of determined aims and objectives.¹ Peers comprises domain of friendship serve as a vital social environment wherein the child lives and develops. Association with peers in school and college students is of greatest importance. The effect of peers on students' conduct, i.e. their social, educational, moral and emotional improvement, begins to be stronger within the educational

surroundings.² Peers relationship served purposes of belongings in friendship, assistance in routine tasks, nurturance for self-esteem and self-concept and validation of organismic experiential growth and therefore holds critical importance in an adolescent's life.³ World Health Organization in 2017 has specified the adolescent age between 10 years to 19 years which is also considered a segment of youth.⁴

Children and adolescents who grow up in loving, consistent environments with warm, caring peers and nurturing family contributors have strong educational competencies than youngsters who grow up in miserable family

TABLE I: DEMOGRAPHIC CHARACTERISTICS OF ADOLESCENTS

Variable		Frequency (n=608)	Percentage
Gender	Female	278	45.7
	Male	330	54.3
Age (years)	16-17	285	46.9
	> 17-19	323	53.1
Class	1 st year	329	54.1
	2 nd year	279	45.9
Profession	Arts	419	68.9
	Science	189	31.1
Family system	Joint	400	65.8
	Nuclear	208	34.2
Residential area	Rural	429	70.6
	Urban	179	29.4
Institutions	Government	333	54.8
	Private	275	45.2

TABLE II: MACRO PROCESS ANALYSIS FOR MEDIATION OF SELF-REGULATION ON POSITIVE DEVELOPMENT WITH PEER RELATIONSHIP

Effects	B	95% CI	
		Lower Limit	Upper Limit
Total	-0.43***	-0.53	-0.32
Direct	-0.42***	-0.52	-0.31
Indirect	-0.01***	0.007	-0.02

***p<0.001; β= Standardized Regression Coefficient, CI= Confidence Interval

TABLE III: MACRO PROCESS ANALYSIS FOR MEDIATION OF SELF-REGULATION ON POSITIVE YOUTH DEVELOPMENT WITH REJECTION SENSITIVITY

Effects	B	95% CI	
		Lower Limit	Upper Limit
Total	-0.10	-0.55	0.34
Direct	0.003	-0.44	0.45
Indirect	-0.11***	-0.20	-0.03

***p<0.001; β= Standardized Regression Coefficient, CI= Confidence Interval

metropolitan cities of Lahore, and Karachi.^{11,12} Youth is considered as an asset of the nation and if they will be mentally healthy, they can perform well in nation's development. A healthy youth contributes to the prospect and in elevation of nation. For this purpose, it is important to investigate issues (such as positive development, peer influence, and role of their personality dynamics of rejection sensitivity and self- regulation) that are crucial in this segment of age. The findings of this study would be beneficiary for society implying that healthy and strong peer relationship play an important role in self-regulation, rejection sensitivity and positive development. This study would be significance endeavor to understand the relationship between peer relationship,

rejection sensitivity, self-regulation and positive development and issues encompassing them to resolve via counseling provision. By understanding these variables counselors would help in how to solve these issues in adolescents and promote the healthy and good peer relationship. It would also serve as a future reference for related this research. Keeping in view the empirical literature and cultural set up of Pakistani society, present study hypothesized as (1) Self-regulation will be a significant mediator in peer relationship, and positive development among adolescents. (2) Self-regulation will be a significant mediator in rejection sensitivity and positive development among adolescents.

METHODS

This cross-sectional research was conducted from October, 2018 to September, 2019, at Department of Psychology, University of Gujrat, Gujrat, Pakistan. Research study was approved by Advanced Studies and Research Board of the University of Gujrat, Gujrat, vide letter no. PSY/UOG/20/2474.

This study was carried out in two phases. In Phase I, Self-Regulation Questionnaire (SRQ), Rejection Sensitivity Questionnaire (RSQ), and Positive Youth Development Inventory (PYDI) were translated and adapted in in Urdu for the use with Pakistani study sample. However, confirmatory factor analysis was not conducted on the translated versions. Test try out was conducted on a sample of 130 students in which they were selected through probability method of simple random technique because the sampling frame in the form of attendance sheet was available. After sorting permission from the principal and class teacher, the attendance sheet was taken. The students' roll numbers were randomly selected by stripping off the roll numbers in a box and randomly selecting roll number strips of 130 students.

For pilot study, Yumane formula¹² was used to calculate the sample size. The sample was taken from Government Commerce College for girls Gujrat and Government Commerce College for Boys of Gujrat. Initial permission was taken from authors of self-regulation, rejection sensitivity and positive development scales to translate from English to Urdu. Participants were asked to describe any item which did not reveal cultural relevance or was not easy to understand. The inclusion criteria of participants were age range between 16 to 19 years old student studying either in first or second year of college. The exclusion criteria focused on not taking students below 16 years and above 19 years of age.

Forward-backward translation technique was used to translate three scales and permission was taken from the original author. Three bilingual specialists from English departments

were requested to translate the questionnaire from English to Urdu separately. Furthermore, 3 bilingual committee individuals (2 MPhil degree holders and 1 PhD degree holders) were taken from the department of Psychology was approached to finalize best Urdu form of self-regulation, rejection sensitivity and positive development.

Two bilingual specialists, naive to original English items, translated the Urdu version of all items into English dialect. Three other experts (MPhil degree holders) assessed the suitability of the Urdu and sentence structure of the instrument. They assessed the content validity of finalized Urdu translated version selected scale. For backward translation, 3 bilingual specialists (2 MPhil degree holders and 1 PhD degree holder) from English department translated the Urdu version of the scales back into English language independently. Three experts (M. Phil degree holders) with one year of teaching experience from the department of psychology were to discuss the equivalence in meaning and grammatically form of new English translation with the original English, keeping in view the criteria of conceptual equivalence and language difficulty. They deleted unnecessary words and heightened the comprehensiveness according to the cultural context of Pakistan. Therefore, discrepancies in conceptual meanings between English and Urdu versions were reduced. Thus a final draft was prepared for pretesting. The (statistical package for social sciences) SPSS 21 version and MACRO PROCESS 3.5 Hayes version were used.

Reliability analysis was used to check the reliability of all scales which translated in to Urdu language. The reliability of Self-regulation questionnaire was ($\alpha=.710$) which showed high internal consistency for the 22 items of self-regulation, and the reliability of Adolescent Peer Relations Instrument was ($\alpha=.838$) which showed the relatively high internal consistency for the 36 items of peer relationship. The original scale rejection sensitivity consists of 18 items but one item was discarded from this scale for the present study because it

was not related to the culture of Pakistan, so that's why for the present study 17 items of rejection sensitivity were used. The reliability of rejection sensitivity scale was ($\alpha=.704$). The reliability ($\alpha=.851$) indicated the relatively high consistency for the 55 items of positive youth development in pilot study.

The item number 10, "After graduation, you can't find a job and ask your parents if you can live at home for a while" from rejection sensitivity was discarded with the permission of author of rejection sensitivity scale because this item was referred to mainly American culture and European culture where children, after their graduation get separated from their parents and live independent life. In our culture, children are solely the responsibility of their parents if individual do not get job after graduation they do not need to say their parents they can live at home for a while, because in Pakistan adolescence live with their parent whether they find a job or not. In Pakistani culture, children live in joint family system and most of the time, children live with their parents even after their marriage. So this item doesn't apply in our culture and society. That's why item number 10 was removed for the present study and total 17 items of rejection sensitivity was used for the present study to collect data.

In Phase II, the mediating role of self-regulation in peer relationship, rejection sensitivity and positive development adolescence was measured. The population of the present study consisted of government and private college's students of Sara-i-Alamgir. In the first stage, four colleges were selected through random sampling technique. In the second stage, two strata were made like government colleges and private colleges. For this study, sampling frame was available. Because every college had different number of students and different number of students in each class also, so proportional random sampling technique was used. For this study, sampling frame was obtained from administration of colleges. After that sample size ($n=608$) was calculated by using Yumane formula¹² given as $n=$

$N/1 + N(e)^2$ Where n is the sample size, N is the population size, and e is the level of precision. They were selected from 1st and 2nd year students of government and private colleges using Stratified Proportionate Random Sampling technique. The inclusion criteria of participants were age range between 16 to 19 years old student studying either in first or second year of college. The exclusion criteria focused on not taking students below 16 years and above 19 years of age. Their demographic characteristics were discussed in table I.

SRQ consisted of 22 items and is a five-point Likert scale, divided into four subscales 1) Plan; 2) Monitor; 3) Control; 4) Reflect. The original reliability of self-regulation questionnaire was (.89). The scale was translated in Urdu for the current study.¹³ APRI consisted of 36 items and six-point Likert responses. It is divided into two sections: A measured Bullying and section B measured Victimization. In each section, there were three subscales verbal, physical and social. The original reliability of peer relationship questionnaire was (.87). The scale was translated in Urdu for the current study.¹⁴ RSQ consisted of 18 items and six-point Likert responses. The item number 10 from rejection sensitivity was discarded with the permission of author of rejection sensitivity scale because the item was not according to our culture, 17 items of rejection sensitivity was used for the present study to collect data. The original reliability of rejection sensitivity scale was (.84). The scale was Urdu translated for the current study.¹⁵ PYDI consisted of 55 items and four-point Likert responses. The positive youth development divided into six subscales 1) Competence; 2) Character; 3) Connection; 4) Caring; 5) Confidence; 6) Contribution. The original reliability of positive youth development scale was (.92), and the original validity of positive youth development questionnaire was (.80).¹⁶

Permission of class teacher was taken to collect data from their class and asked to give 20-25 minutes to their student to fill the questionnaire. Informed consent in written form was filled by the

respondents. The respondents were assured for the confidentiality. They were asked to first fill the demographic data sheet and then proceed to SRQ, APRI, RSQ and PYDI. The participants were requested to complete the questionnaires honestly. If the participants did not understand the form, they were given the required explanation. Descriptive statistics on SPSS-21 was used to find out the frequencies and percentage of demographics. MACRO PROCESS version 3.5 Hayes was used to analyze self-regulation as mediator in peer relationship, rejection sensitivity and positive development.

RESULTS

Out of 608 participants, 330 (54.3%) were males and 278 (45.7%) were females. Majority of participants were ranging in age from 18-19 years ($n=323$, 53.1%). About 54.1% were 1st year students with Arts (68.9%) and living in joint family system (65.8%) of rural areas (70.6%) [Table I]. Model 2 indicated 1% variance which reveals that self-regulation had partially mediated peer relationship and positive youth development among adolescents ($B= -0.01$, $p< .001$) [Table II]. This showed that peer relationships in the context of fight-or-flight response of the adolescents have negatively influenced their development. However, their self-regulatory strategies have partially reduced the impact and led to positive development. Model 2 indicated 11% variance which reveals that self-regulation had significantly mediated rejection sensitivity and positive youth development among adolescents ($B= -0.11$, $p< .001$) [Table III]. This showed that rejection sensitivity has negative impact on development but self-regulatory strategies have completely reduced the effect of rejection sensitivity on development in students

DISCUSSION

This research was an attempt to explore the mediating role of self-regulation in peer relationship, rejection sensitivity and positive development among adolescents. The findings of present study have confirmed the first hypothesis that self-regulation will mediate in peer relationship and positive

development among adolescents. The findings of Table II in study showed negative relationship of peer interaction with positive development. Result indicate that 12% variance which reveals that self-regulation had statistically significant mediate the role in peer relationship and positive development among adolescents ($\beta=.28$, $p<.01$). Peer relationship has been found to impact positive development negatively because here the bullying and victimization aspect of interaction between same aged fellows is observed. These results were also supported by pre-existing literature. Numerous studies showed that emotional regulation has mediated effect on peer acceptance and peer rejection along with social well-being.^{17,18}

Peer relationship, developmental expectation, self-perceived capacity, and wellbeing were compared in Dutch and Eastern of 15 to 18 years old. The outcomes demonstrate that Dutch teenagers are increasingly happy with their associations with companions, expect achieve developmental tasks at prior ages, feel progressively skillful about their capacities, and report a larger amount of wellbeing than Japanese youths. Peer relationship is found to be associated with wellbeing and positive development among adolescents.¹⁹ Self-regulation and peer effect as determinants of senior school student's positive development was also investigated. College students (204) were randomly selected from the 3 geopolitical zones of Katsina kingdom. The outcomes confirmed that self-control and peer effect collectively represented 1.2% the total variance in positive development.²⁰ The results of another study on 273 youth aged between 6 to 17 years showed that adolescent self-regulation was influenced by peer interaction. Basic cognitive capabilities altered by mere experiences with friends, while more complicated decision making and emotion control process aided the excellence of that experience.²¹ A structural equation model was tested on sample of six seventy-seven 677 young people at junior schools in Malaysia extending in age from 18 to 23 years. The outcome revealed that there was a significant relationship between peer interaction with positive youth

development.²²

Our findings indicated that because peer relationship encompassed victimization and bullying aspect of relationship among adolescents, the results have posited significant negative correlation between the study variables. If adolescents high score on peer relationship its mean the positive development in adolescent is low and vice versa. When individual have good self-regulation skills then its partially mediate to buffer peer interaction in terms of victimization and bullying which leads to positive development in adolescents.

There was statistically significant complete mediating role of self-regulation in rejection sensitivity among adolescents, hence confirming second hypothesis of the study. The reason is that adolescents have good self-regulation skills and that's why they have showed low sensitivity to rejection, which in turn has enhanced their positive development. The previous researches supported these findings. A research was conducted in order to measure the moderating role of self-regulation in rejection sensitivity and positive behavior among college student in classroom setting. Result showed that there was significant moderating role of self-regulation in rejection sensitivity.²³ The effect of self-regulation in emotional reactivity and rejection sensitivity was measured and found to be significant.²⁴ Self-regulation ability buffered rejection sensitivity from interpersonal difficulties (particularly friends) and well-being.²⁵ Therefore, although the age period of adolescence is upheaved in emotions, yet identification and management of emotions, and using conscious efforts expedite them in bearing partial dismissal from others.^{26,27} The implications of the present research findings highlighted the importance of counseling for self-regulatory strategies in adolescents facing any kind of problems in peer relationships at college.

CONCLUSION

Self-regulation served as a partial mediator between peer relationships and positive development among adolescents. However, complete mediation of self-regulation was evident

between rejection sensitivity and positive development. Thus, implications suggested launching of workshops for enhancement of self-regulatory strategies among adolescents to boost their relationships and well-being

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under:

SB: Conception, acquisition, analysis and interpretation of data, drafting the manuscript, approval of the final version to be published.

SS: Concept and study design, analysis and interpretation of data, drafting the manuscript, critical review, approval of the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

CONFLICT OF INTEREST

Authors declared no conflict of interest

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DATA SHARING STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request



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