

THE RELATIONSHIP BETWEEN METAEMOTIONS AND EMOTIONAL REGULATION AMONG ORPHANS AND OTHER VULNERABLE CHILDREN (OVC)

Joshy Jesline*, John Romate**, R. Lakshmi *****

Abstract:

Emotional regulation refers to the ability to direct and manage one's own emotions and emotional responses. It is widely known that adverse childhood experiences and stressful life events are important risk factors for developing psychopathology in the future. Adolescents may have a specific need to control their emotions in reaction to stressors because of the increased independence and unique demands they face during adolescence compared to childhood. Among this, children who lack a family's love and care, orphans and other vulnerable children (OVC) housed in institutions tend to experience behavioural and psychological issues compared to others. Therefore, the present study tries to study the relationship between emotional regulation and metaemotions among adolescents belonging to three different groups such- students from Private English medium schools, students from Government schools and Orphans and Vulnerable children (OVC). It also tries to study the relationship between the various types of metaemotions with difficulties in emotional regulation. The study was carried out on 313 participants belonging to all three groups, both male and female. The findings from the study indicates that there is a positive relationship between negative metaemotions and difficulties in emotional regulation. Among these three groups of adolescents, OVC children has maximum emotional regulation difficulties and higher negative metaemotion compared to other groups.

Keywords: *Metaemotions, Difficulties in emotional regulation, Adolescents, OVC*

About authors:

*** Assistant Professor , ***** Research Scholar Department of Psychology, Central University of Karnataka, Kalaburagi, India

Corresponding Author: Joshy Jesline, Department of Psychology, Central University of Karnataka. E-mail: jeslinejoshy@gmail.com

INTRODUCTION

The pandemic of Covid-19 came with multiple ramifications across populations. The novel and uncertain nature of the pandemic resulted in developing various psychological concerns among people irrespective of age, gender and financial status, but to varying degrees (Singh, 2020; Jesline, 2021). The education system was severely affected with the unforeseen changes and limitations that arose out of the pandemic, lockdown and online teaching and learning. As a result, children were among the ones who were most affected and vulnerable to psychological issues such as anxiety, stress, poor emotional regulation

(Giallonardo et al., 2020). A study conducted by Kwon et al. (2017) found that social engagement and the school learning environment has a positive effect on emotional regulation, which in turn influences academic performance. The structure of learning and schooling has been changed by the closing of schools, which affected the normal development of a child in the physical, psychological and emotional facets (Tarkar, 2020).

Curbing the ways in which emotions are expressed can lead to difficulties in emotional regulation which includes various aspects (Gratz, 2004). Non-Acceptance of emotional responses of individuals, lack of emotional

clarity, difficulty in engaging with goal-oriented behaviour, lack of emotional awareness, difficulty in impulse control and lack of strategies to regulate emotions are such aspects which are compromised as a result of poor emotional regulation (Neumann, 2009; Buchanan, 2021). Effective emotional regulation can also help in dealing with mild psychological distress effectively, whereas difficulties in the same makes it harder for the person to focus on the goal and efficiently deal with life situations which elicit negative emotions such as anger or sadness (Hallion, 2018).

Emotional regulation refers to the ability to direct and manage one's own emotions and emotional responses. This is one of the main socio-emotional skills which enables flexibility in emotionally demanding scenarios (Koole, 2009). Adolescence is that phase of life where one faces multiple challenges such as increased academic stressors, elevated values for relationships with peers and romantic partners, and declined need for support from family (Casey, 2010). Depression and anxiety disorders are more likely to develop during adolescence (Beesdo, 2010). It is widely known that adverse childhood experiences and stressful life events are significant risk factors for developing psychopathology in the future (Kessler, 2010). The ability to control one's emotional responses to these situations may potentially play a mediating function. Teenagers may have a specific need to control their emotions in reaction to stressors because of the elated freedom and unique needs they face during adolescence compared to childhood. Failure to do so could increase the chance of mental health issues (Young, 2019).

Among these adolescents, some groups have a higher chance of developing these emotional issues in comparison to the others (Saleem, 2013). According to the Integrated Child Protection Scheme of India, "Children and adolescents who are orphans, runaways, or abandoned by families and are raised in institutional homes form a vulnerable group called the OVC or Orphans and Vulnerable Children" (Ministry of Women and Child Development, 2017). Since they lack a family's love and care, these children are housed in institutions as a result they are more likely than others to experience behavioural and psychological issues. However, studies

examining the psychological wellbeing of these kids in India are scarce (Kaur, 2018).

According to emotion theory, reflexivity or experiencing an emotion can lead to another feeling known as a meta emotion, which can alter the original or first-order emotion's entire experience (Norman, 2016). Meta-emotions are feelings that develop as a result of other emotions, such as guilt or rage (Bailen, 2019). It is nothing but emotions about emotions or second order emotions (Miceli, 2009).

Positive (compassionate care, and interest) and negative (anger, suppression, contempt, and tough control) meta emotions can lead to adaptive or maladaptive behaviour (Mitmansgruber, 2009). Although metaemotions are considered as a different concept from the emotions itself, it is strongly interlinked with emotional regulation, the course of observing, assessing, experiencing and managing emotions in order to achieve personal goals (Berking, 2012). Metaemotions are considered as instigators of emotional regulation that can change or alter emotions depending on how an individual evaluates a primary emotion (Miceli, 2009).

Therefore, the present paper attempts to study the relationship between emotional regulation and metaemotions among adolescents belonging to three groups such as - students from English medium schools, students from Government schools and Orphans and Vulnerable children (OVC). It also tries to study the relationship between the various types of metaemotions with difficulties in emotional regulation.

METHODS

STUDY DESIGN

The study was conducted in a descriptive manner utilizing quantitative strategies in gathering the information. It is a cross-sectional design study.

SETTINGS AND PARTICIPANTS

The participants of the study were 313 adolescents pursuing their education in middle school and high school in Karnataka. The students belonged to various backgrounds such as Private English Medium School, Government Kannada Medium School and Orphans and Vulnerable Children. The participants were aged between 13 and 17 years, Mean age= 14.6, SD= 1.18. Students with any difficulty in

comprehending the questionnaire or any psychiatric issues diagnosed by a clinician were excluded from the study.

TOOLS

Meta Emotions Scale:

To measure the meta-emotions among the students, the Meta Emotions Scale (MES) by Mitmansgruber was used (Mitmansgruber, 2009). The scale consists of 28 items that are divided in relation to six metaemotion subscales. These 6 metaemotions comes under 2 main types of metaemotions - negative and positive meta emotions. Under negative metaemotions, there are 4 subtypes such as- anger, contempt, tough control and suppression. Further, under positive metaemotions there are 2 subtypes - compassionate care and interest. Based on the actual experience or behaviour pattern and not based on what seems to be an ideal way to react, the participants are directed to approach each item. A higher score on the MES for negative metaemotions could be obtained by summing up all the items under the subtypes of negative metaemotions and likewise, by adding the positive metaemotions subtypes together, a raw score of positive metaemotions could be obtained.

Difficulties in Emotional Regulation (DERS):

The DERS is a self-administered questionnaire for measuring emotional regulation and any difficulties associated with it. The tool consists of a total of 36-items and there are about 6 subscales. Each of these items are scored on 6 subscales namely, "Lack of Emotional Awareness (6 items), Lack of Emotional Clarity (5 items), Difficulties Controlling Impulsive Behaviours When Distressed (6 items), Difficulties Engaging in Goal-Directed Behaviour When Distressed (5 items), Nonacceptance of Negative Emotional Responses (6 items), and Limited Access to Effective ER Strategies (8 items)" (Hallion, 2018). Each question is scored on a 5-point scale wherein 1 is almost never to 5 is almost always. The raw scores for each domain are attained by adding the scores on the corresponding items (Gratz, 2004).

DATA COLLECTION

Participants belonging to Private Schools and Government schools were

approached in their respective schools and participants who were Orphans and Vulnerable children were approached in their respective institutions they reside in. All participants were briefed about the objectives and methodology of the study. An informed consent was also provided to all the participants and their participation was completely voluntary. Confidentiality of the data collected was also ensured. The questionnaires were all self-administered and was shared using printed copy of the questionnaires.

STATISTICAL ANALYSES

Numerical data were entered in Microsoft Excel and analysed using SPSS Statistics, version 22.0 (IBM Corporation). The prevalence of a result variable was estimated along with confidence intervals of 95% at 0.05 level and 99% at 0.01 level. Pearsons' Correlation was done to determine the relation between Meta emotions, DERS and their subscales. A MANOVA along with Post hoc test (LSD) was done to find the mean difference between the socio-demographic variables with Meta emotions, DERS and their subscales.

RESULTS

Out of a total of 320 adolescents who took part in the study, 313 of them were selected and the rest were excluded due to missing data points. There were around 140 male and 173 females in the study belonging to the age group 13 to 17, having an average age of 14.6 (SD =1.18) years.

The participants of the study were divided into 3 main categories based on their schooling and background, Private English Medium School (N= 105), Government Kannada Medium School (N=99) and Orphans and Vulnerable Children (N=109). Further, based on their Residence, they were divided into Urban (N=50), Semi-Urban (N=208), Rural (N= 55). Finally, based on their Socioeconomic status, they were divided into Upper (N=7), Middle (N=98) and Lower (N=208).

Table 1 Frequency of the variables

		Variables					Frequency					
		Gender										
Male							140					
Female							173					
Sl.No:	Variables	1	2	3	4	5	6	7	8	9	10	11
		Category of Children										
Pvt School							105					
Govt School							99					
OVC							109					
		Residence										
Urban							50					
Semi-Urban							208					
Rural							55					
		Economic Status										
Upper							7					
Middle							98					
Lower							208					

The descriptive statistics and inter correlations among the major study variables are shown in Table 2.

Table 2 Descriptive Statistics and Correlation Coefficients for study variables

SL.NO:	Variables	Mean	S. D	1	2
1	Positive Metaemotions	40.16	10.88		
2	Negative Metaemotions	65.16	11.97	-.407**	
3	Difficulties in Emotional Regulation	119.48	23.67	-.539**	.613**

** . Correlation is significant at the 0.01 level (2-tailed).

From the data obtained, it can be noted that there is a significant negative correlation between Positive Metaemotions and Difficulties in Emotional Regulation ($r = -.539^{**}$, $p < .01$). Also, there exists a significant positive correlation between Negative Metaemotions and Difficulties in Emotional Regulation ($r = .613^{**}$, $p < .01$). Further, Negative Metaemotions significantly relates negatively with Positive Metaemotions ($r = -.407^{**}$, $p < 0.01$).

The descriptive statistics and inter correlations among the subscales of the major study variables are shown in Table 3.

Table 3 Descriptive Statistics and Correlation Coefficients for study variables

		1	2	3	4	5	6	7	8	9	10	11	12
1	Anger												
2	Contempt	.288**											
3	Tough Control	.179**	.336**										
4	Suppression	-.022	.009	.055									
5	Compassionate Care	-.216**	-.338**	-.389**	-.200**								
6	Interest	.132*	-.190**	-.287**	-.081	.533**							
7	Non-Acceptance of Emotional Responses	.246**	.294**	.440**	.234**	-.481**	-.257**						
8	Difficulty Engaging in Goal Directed Behaviour	.235**	.328**	.369**	.127*	-.362**	-.138*	.524**					
9	Impulse Control Difficulties	.260**	.269**	.463**	.194**	-.428**	-.200**	.652**	.584**				
10	Lack of Emotional Awareness	.175**	.293**	.322**	.093	-.564**	-.520**	.418**	.364**	.349**			
11	Limited Access to Emotional Regulation Strategies	.264**	.284**	.448**	.153**	-.364**	-.130*	.630**	.601**	.663**	.336**		
12	Lack of Emotional Clarity	.342**	.381**	.447**	.176**	-.606**	-.342**	.605**	.623**	.604**	.558**	.590**	

** . Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

From the data obtained in Table 3, the correlations between the subscales of the study variables – Metaemotions and Difficulties in Emotional Regulation can be observed. Among the Negative Metaemotions, Anger has a significant positive correlation with Non-Acceptance of Emotional Responses ($r = 0.246^{**}$, $p < 0.01$); Difficulty Engaging in Goal Directed Behaviour ($r = 0.235^{**}$, $p < 0.01$); Impulse Control Difficulties ($r = 0.260^{**}$, $p < 0.01$); Lack of Emotional Awareness ($r = 0.175^{**}$, $p < 0.01$); Limited Access to Emotional Regulation Strategies ($r = 0.264^{**}$, $p < 0.01$); Lack of Emotional Clarity ($r = 0.342^{**}$, $p < 0.01$). Along with that, the Negative Metaemotion Contempt has a positive significant correlation with Non-Acceptance of

Emotional Responses ($r = 0.294^{**}$, $p < 0.01$); Difficulty Engaging in Goal Directed Behaviour ($r = 0.328^{**}$, $p < 0.01$); Impulse Control Difficulties ($r = 0.269^{**}$, $p < 0.01$); Lack of Emotional Awareness ($r = 0.293^{**}$, $p < 0.01$); Limited Access to Emotional Regulation Strategies ($r = 0.284^{**}$, $p < 0.01$); Lack of Emotional Clarity ($r = 0.381^{**}$, $p < 0.01$). The next Negative Metaemotion Tough Control also has a significant correlation with the subscales of Difficulties in Emotional Regulation. From the data it can be observed that there is a positive correlation with Non-Acceptance of Emotional Responses ($r = 0.440^{**}$, $p < 0.01$); Difficulty Engaging in Goal Directed Behaviour ($r = 0.369^{**}$, $p < 0.01$); Impulse Control Difficulties ($r = 0.463^{**}$, $p < 0.01$); Lack of

Emotional Awareness ($r = 0.322^{**}$, $p < 0.01$); Limited Access to Emotional Regulation Strategies ($r = 0.448^{**}$, $p < 0.01$); Lack of Emotional Clarity ($r = 0.447^{**}$, $p < 0.01$). Lastly, for the Negative Metaemotion Suppression, there is a strong positive correlation between Non-Acceptance of Emotional Responses ($r = 0.234^{**}$, $p < 0.01$); Difficulty Engaging in Goal Directed Behaviour ($r = 0.127^{**}$, $p < 0.01$); Impulse Control Difficulties ($r = 0.194^{**}$, $p < 0.01$); Lack of Emotional Awareness ($r = 0.093^{**}$, $p < 0.01$); Limited Access to Emotional Regulation Strategies ($r = 0.153^{**}$, $p < 0.01$); Lack of Emotional Clarity ($r = 0.176^{**}$, $p < 0.01$).

Further, among the Positive Meta Emotions, Compassionate Care has a significant negative correlation with Non-Acceptance of Emotional Responses ($r = -0.481^{**}$, $p < 0.01$); Difficulty Engaging in Goal Directed Behaviour ($r = -0.362^{**}$, $p < 0.01$); Impulse Control Difficulties ($r = -0.428^{**}$, $p < 0.01$); Lack of Emotional Awareness ($r = -0.564^{**}$, $p < 0.01$); Limited

Access to Emotional Regulation Strategies ($r = -0.364^{**}$, $p < 0.01$); Lack of Emotional Clarity ($r = -0.606^{**}$, $p < 0.01$). Along with that, the Positive Metaemotion Interest has a strong significant negative correlation with Non-Acceptance of Emotional Responses ($r = -0.257^{**}$, $p < 0.01$); Difficulty Engaging in Goal Directed Behaviour ($r = -0.138^{**}$, $p < 0.01$); Impulse Control Difficulties ($r = -0.200^{**}$, $p < 0.01$); Lack of Emotional Awareness ($r = -0.520^{**}$, $p < 0.01$); Limited Access to Emotional Regulation Strategies ($r = -0.130^{**}$, $p < 0.01$); Lack of Emotional Clarity ($r = -0.342^{**}$, $p < 0.01$).

Role of Demographic Variables

In order to study the role of sociodemographic variables, such as Gender, Category based on schooling and background, Residence and Socio-Economic Status in Negative Metaemotions, Positive Metaemotions and Difficulties in Emotional Regulation, a multivariate (MANOVA) and a post hoc test (LSD) was done on the data.

Table 4 Descriptive statistics of study variables based on Category

Sl.No:	Category	Pvt. School		Govt. School		OVC	
		Mean	S. D	Mean	S. D	Mean	S. D
1	Negative Metaemotions	55.59	8.37	63.62	8.26	75.77	8.94
2	Positive Metaemotions	49.36	7.83	40.7	9.74	30.81	5.11
3	Anger	15.83	4.81	18.41	4.64	20.83	3.43
4	Contempt	16.65	5.05	18.78	4.85	22.82	4.96
5	Tough Control	16.22	4.96	18.02	4.84	23.68	4.86
6	Suppression	6.9	2.19	8.4	2.76	8.45	2.47
7	Compassionate Care	29.33	4.63	23.37	6.11	16.49	3.52
8	Interest	20.03	5.61	17.32	4.98	14.32	3.05
9	Difficulties in Emotional Regulation	98.5	24.49	117.36	8.61	141.62	6.78
10	Non-Acceptance of Emotional Responses	15.61	6.33	19.34	2.8	23.44	3.48
11	Difficulty Engaging in Goal Directed Behaviour	15.85	5.28	18.12	2.08	21	1.85
12	Impulse Control Difficulties	15.87	5.82	19.82	2.62	22.74	2.86
13	Lack of Emotional Awareness	17.2	4.53	19.47	3.09	23.75	2.28
14	Limited Access to Emotional Regulation Strategies	20.72	7.22	23.15	4.95	29.02	3.96
15	Lack of Emotional Clarity	13.25	4.08	17.45	1.6	21.67	2.08

From the results, significant mean differences were observed among the students for both Metaemotions and Difficulties in Emotional Regulation based on their category.

Table 5 Post hoc results of Metaemotions and DERS based on Category

Sl.No:	Dependent Variable	Mean Difference	Std. Error	Sig.
--------	--------------------	-----------------	------------	------

1	Negative Metaemotions	Pvt. School	Govt.School	-8.03 [*]	1.196	0.00
			OVC	-20.18 [*]	1.168	0.00
		Govt.School	OVC	-12.15 [*]	1.186	0.00
2	Anger	Pvt. School	Govt.School	-2.59 [*]	0.606	0.00
			OVC	-5.00 [*]	0.591	0.00
		Govt.School	OVC	-2.41 [*]	0.6	0.00
3	Contempt	Pvt. School	Govt.School	-2.13 [*]	0.694	0.00
			OVC	-6.17 [*]	0.677	0.00
		Govt.School	OVC	-4.04 [*]	0.688	0.00
4	Tough Control	Pvt. School	Govt.School	-1.80 [*]	0.685	0.01
			OVC	-7.46 [*]	0.668	0.00
		Govt.School	OVC	-5.66 [*]	0.679	0.00
5	Suppression	Pvt. School	Govt.School	-1.51 [*]	0.347	0.00
			OVC	-1.55 [*]	0.339	0.00
		Govt.School	OVC	-0.05 [*]	0.344	0.90
6	Positive Metaemotions	Pvt. School	Govt.School	8.66 [*]	1.082	0.00
			OVC	18.55 [*]	1.056	0.00
		Govt.School	OVC	9.89 [*]	1.073	0.00
7	Compassionate Care	Pvt. School	Govt.School	5.96 [*]	0.676	0.00
			OVC	12.85 [*]	0.66	0.00
		Govt.School	OVC	6.89 [*]	0.67	0.00
8	Interest	Pvt. School	Govt.School	2.71 [*]	0.652	0.00
			OVC	5.71 [*]	0.636	0.00
		Govt.School	OVC	3.00 [*]	0.646	0.00
9	Difficulties in Emotional Regulation	Pvt. School	Govt.School	-18.87 [*]	2.173	0.00
			OVC	-43.13 [*]	2.121	0.00
		Govt.School	OVC	-24.26 [*]	2.154	0.00
10	Non Acceptance of Emotional Responses	Pvt. School	Govt.School	-3.73 [*]	0.629	0.00
			OVC	-7.83 [*]	0.614	0.00
		Govt.School	OVC	-4.10 [*]	0.623	0.00
11	Difficulty Engaging in Goal Directed Behaviour	Pvt. School	Govt.School	-2.27 [*]	0.483	0.00
			OVC	-5.15 [*]	0.472	0.00
		Govt.School	OVC	-2.88 [*]	0.479	0.00
12	Impulse Control Difficulties	Pvt. School	Govt.School	-3.95 [*]	0.567	0.00
			OVC	-6.88 [*]	0.553	0.00
			OVC	-2.92 [*]	0.562	0.00
13	Lack of Emotional Awareness	Pvt. School	Govt.School	-2.27 [*]	0.479	0.00
			OVC	-6.55 [*]	0.468	0.00
		Govt.School	OVC	-4.28 [*]	0.475	0.00
14	Limited Access to Emotional Regulation Strategies	Pvt. School	Govt.School	-2.43 [*]	0.776	0.00
			OVC	-8.29 [*]	0.758	0.00
		Govt.School	OVC	-5.87 [*]	0.77	0.00
15	Lack of Emotional Clarity	Pvt. School	Govt.School	-4.21 [*]	0.393	0.00
			OVC	-8.42 [*]	0.384	0.00
		Govt.School	OVC	-4.22 [*]	0.39	0.00

*. The mean difference is significant at the .05 level.

From the table, it can be noted that the type of background of the students has an impact on their Metaemotions and their Difficulties in Emotional Regulation. Among Metaemotions, it was noted that Negative Metaemotions and its subscales are higher among participants from OVC category (M= 75.77) in comparison to

participants from Government Schools (M= 63.62) and Private Schools (M = 55.59). The results from the posthoc tests also show significant mean difference (M.D) between OVC and Pvt. Medium (M.D = 20.18*; p < .01) and between OVC and Govt. Medium (M.D

=12.15*; $p < .01$) and also between Pvt Medium and Govt Medium (M.D = -8.03*; $p < .01$).

In addition, Positive Metaemotions and its subscales are noted to be lower among participants from OVC category (M= 30.81) in comparison to participants from Government Schools (M. D= 40.70) and Private Schools (M.D =49.36). Here, the results indicate a significant mean difference between OVC and Pvt. Medium (M.D = -18.55*; $p < .01$) and between OVC and Govt. Medium (M.D = -9.89*; $p < .01$) and also between Govt Medium and Pvt Medium (M.D = -8.66*; $p < .01$).

Further, Difficulties in Emotional Regulation and its subscales have a significant mean difference between each category of the participants, OVC and Pvt. Medium (M.D = 43.13*; $p < .01$) and between OVC and Govt. Medium (M.D = 24.26*; $p < .01$) and also between Govt Medium and Pvt Medium (M.D = 18.87*; $p < .01$). Among this, participants from OVC category have the highest Difficulty in Emotional Regulation (M=141.62) followed by Govt. Medium (M= 117.36) and then Pvt. Medium (98.50).

Table 6 Descriptive statistics of study variables based on the Residence

Residence		Urban		Semi-Urban		Rural	
Sl.No:		Mean	S. D	Mean	S. D	Mean	S. D
1	Positive Metaemotions	49.22	7.862	40.24	10.558	31.64	7.137
2	Negative Metaemotions	57.18	7.480	64.78	12.092	73.82	9.019
3	Difficulties in Emotional Regulation	103.64	23.739	118.13	22.187	138.98	14.526

From the results, significant mean differences were observed among the students for both Metaemotions and Difficulties in Emotional Regulation based on their residence.

Table 7 Post hoc results of Metaemotions and DERS based on Residence

Sl.No:	Dependent Variable			Mean Difference	Std. Error	Sig.
1	Difficulties in Emotional Regulation	Urban	Semi-Urban	-14.49*	3.358	0.00
			Rural	-35.34*	4.166	0.00
		Semi-Urban	Rural	-20.85*	3.233	0.00
2	Negative Metaemotions	Urban	Semi-Urban	-7.60*	1.73	0.00
			Rural	-16.64*	2.146	0.00
		Semi-Urban	Rural	-9.03*	1.665	0.00
3	Positive Metaemotions	Urban	Semi-Urban	8.98*	1.52	0.00
			Rural	17.58*	1.885	0.00
		Semi-Urban	Rural	8.60*	1.463	0.00

*. The mean difference is significant at the .05 level.

By observing the results from the table, it can be inferred that the type of residence of the students has an impact on their Metaemotions and their Difficulties in Emotional Regulation. It was observed that Negative Metaemotions was higher among

participants from Rural regions (M= 73.82) in comparison to participants from Semi-urban regions (M= 64.78) and Urban Regions (M=57.18 = .59). The results from the posthoc tests also show significant mean difference (M.D) between Rural and Semi-Urban (M.D = 9.03*; p

< .01) and between Rural and Urban (M.D =16.64*; $p < .01$) and also between Semi-Urban and Urban (M.D =7.60*; $p < .01$).

In addition, Positive Metaemotions and its subscales are noted to be lower among participants from Rural regions (M= 31.64) in comparison to participants from Sub- Urban regions (M =40.24) and Urban regions (M =49.22). Here, the results indicate a significant mean difference between Rural and Semi-Urban (M.D = -8.60*; $p < .01$) and between Rural and Urban (M.D = -17.58*; $p < .01$) and also between Semi-Urban and Urban (M.D = -8.98*; $p < .01$).

Further, Difficulties in Emotional Regulation and its subscales have a significant

mean difference between each residential region of the participants, Rural and Semi-Urban (M.D = 20.85*; $p < .01$) and between Rural and Urban (M.D = 35.34*; $p < .01$) and also between Urban and Semi- Urban (M.D =-14.49 *; $p < .01$). Among this, participants from Rural regions have the highest Difficulty in Emotional Regulation (M=138.98) followed by Semi-Urban (M=118.13) and then Urban Regions (M = 103.64).

Further, from the results, significant mean differences were observed among the students for both Metaemotions and Difficulties in Emotional Regulation based on their socio-economic status

Table 8 Descriptive statistics of study variables based on the Socio-Economic Status

Sl.No:	Economic Status	Upper		Middle		Lower	
		Mean	S.D	Mean	S.D	Mean	S.D
1	Positive Metaemotions	53.86	8.335	49.04	7.733	35.51	9.117
2	Negative Metaemotions	53.86	11.725	55.71	8.152	69.99	10.537
3	Difficulties in Emotional Regulation	109.29	15.724	97.72	24.877	130.08	14.374

Table 9 Post hoc results of Metaemotions and DERS based on Socio-Economic Status

Sl.No:	Dependent Variable		Mean Difference	Std. Error	Sig.
1	Difficulties in Emotional Regulation	Upper	Middle	11.56*	7.175
			Lower	-20.79*	7.048
		Middle	Upper	-11.56	7.175
			Lower	-32.35*	2.247
		Lower	Upper	20.79*	7.048
			Middle	32.35*	2.247
2	Negative Metaemotions	Upper	Middle	-1.86	3.865
			Lower	-16.13*	3.796
		Middle	Upper	1.86	3.865
			Lower	-14.27*	1.21
		Lower	Upper	16.13*	3.796
			Middle	14.27*	1.21
3	Positive Metaemotions	Upper	Middle	4.82	3.401
			Lower	18.34*	3.34
		Middle	Upper	-4.82	3.401
			Lower	13.53*	1.065
		Lower	Upper	-18.34*	3.34
			Middle	-13.53*	1.065

*. The mean difference is significant at the .05 level.

From the above table, the results suggest that, for the variable Negative Metaemotions, there is a significant difference between students belonging to Lower and Upper class (M.D = 16.13*; $P < 0.01$) and also between Lower and Middle class (M.D = 14.27*; $P < 0.01$). Students

belonging to Lower socio-economic background have a significant higher negative metaemotion (M= 69.99) compared to that of Upper class (M= 53.86) and students belonging to Lower socio-economic background have a significant

higher negative metaemotion compared to that of Middle class ($M = 55.71$).

Adding on, for Positive Metaemotions it was observed that there is a significant difference between students belonging to Lower and Upper class ($M.D = -18.34^*$; $P < 0.01$) and also between Lower and Middle class ($M.D = -13.53^*$; $P < 0.01$). Students belonging to Lower socio-economic background have a significant lower positive metaemotion ($M = 35.51$) compared to that of Upper class ($M = 53.86$) and students belonging to Lower socio-economic background have a significant lower positive metaemotion compared to that of Middle class ($M = 49.04$).

For Difficulties in Emotional Regulation, it can be observed from the results that there is a significant mean difference between Upper and Lower class ($M.D = -20.79^*$; $P < 0.05$) and between Middle and Lower Class ($M.D = -32.35^*$; $P < 0.01$).

DISCUSSION

The COVID-19 pandemic, stemmed from the Coronavirus-a microscopic creature that brought the world to a screeching halt, causing the most significant disruption since the Second World War, affected people all over the world belonging to all age groups and professions. Among them, school children also were affected across various emotional, physical, social, and cultural domains (Ray, 2022). They missed their childhood experiences of playing with their peers, traveling in school buses etc. but instead, were all just confined to home glued to their phones or laptops attending online classes or playing online games. Based on the recent reports from the Times of India, the level of mental illnesses among children aged between 10 to 14 is 13.5 and between 15 to 19 is 14.7 (Dinod, 2022).

Hence, the present study aimed to understand and observe the different types of metaemotions and the difficulties in emotional regulation faced by adolescents. The study also tried to compare these with the different backgrounds the participants were from, such as Private English Medium Schools, Govt. Kannada Medium Schools and children who were Orphans and Vulnerable (OVC), to check if the background of the children played a role in the mental difficulties they faced. From the results obtained after the various statistical

analyses on the data, the following inferences were made in the study.

Metaemotions are considered as a guiding force for emotion regulation or as a means to change the strength, frequency and occurrence of emotions which is directed by the way we experience them (Berking, 2012). Proving the primary hypothesis right, it was found from the results that there was a significant correlation between metaemotions and difficulties in Emotional Regulation (DERS). Hence, it can be inferred that any difficulties an individual faces in regulating emotions have a strong association with their metaemotions and its type.

Studies in the past have shown that positive metaemotions are strongly correlated with wellbeing and mindfulness (Mitmansgruber, 2009) and negative metaemotions have been associated with depression and anxiety (Bailen, 2019). Likewise, results from the present study also indicates that an individual's emotional regulation is crucially dependent on the type of metaemotion that is dominating in them. Out of the two different types of metaemotions, positive and negative, it was observed that the positive metaemotions were negatively correlated with DERS and the negative metaemotions were positively correlated with DERS.

While looking into the various types of metaemotions, all the negative meta emotions such as Anger, Tough Control, Suppression and Contempt were found to be directly associated with the subscales of DERS such as, Non-Acceptance of Emotional Responses, Difficulty Engaging in Goal Directed Behaviour, Impulse Control Difficulties, Lack of Emotional Awareness, Limited Access to Emotional Regulation Strategies, and Lack of Emotional Clarity. Additionally, all the positive metaemotions such as Compassionate Care and Interest were found to be negatively associated with difficulties in Emotional Regulation and all its subscales. This indicated that an individual with higher positive metaemotions would have better emotional regulation capacities than an individual with higher negative metaemotions.

The participants of the current study belonged to three different backgrounds, such as Private English medium school, Government Kannada medium school and the rest were Orphans and Vulnerable children (OVC). Out of these, the results from the current study showed

that, for positive metaemotions, children from Privates schools had the highest level, followed by the Government school children and the least was found among OVC. Furthermore, it also indicated that for both negative metaemotions and DERS, children from Private schools were the least, while Government school children were slightly higher and Orphans and Vulnerable Children were the highest. This indicates that the background from which the children come from has a strong association with their emotions and its regulation. Studies in the past have starkly highlighted the influential role of families in the development of emotional regulation in children (Morris, 2007).

Children from the Private schools mostly come from nuclear or joint families, or families wherein the parents are really involved in the lives of their children, whereas the Government school children, although most of them come from nuclear families or extended families, their parents are not as much involved in their lives as most of them are daily wagers who work multiple jobs a day for their survival. Therefore, they fail to spend quality time with their children as that of the former. While in the case of OVC, these children are either orphans or runaways due to reasons such as abusive households or toxic families or conduct issues etc. They lack a caretaker or a family member who spends quality time with them or directs them in their life, consequently, they are placed in an institution by the State that provides for them. Recent literature from another study shows that the family environment of an individual has a pivotal role in their emotional dysfunction and regulation (Raposo, 2022).

Results from the present study, reveal that children who belong to OVC, have lower emotional awareness and clarity and thereby lack any emotional regulation strategies, they find difficulties in accepting their emotional responses, controlling any impulses and in having any goals in life. They have many emotional and behavioural problems due to which they are often involved in problematic instances (Kaur, 2018).

Studies in the past have confirmed that based on the background of residence, an individual can be susceptible to emotional disturbances that can lead to negative emotions like anger, anxiety, sadness, frustration etc. (Arundathi, 2019). The results from the present study highlighted that, participants from rural

regions had higher negative metaemotions and difficulties in emotional regulation in comparison to participants from other regions such as semi urban or urban. Furthermore, participants from urban regions had higher positive metaemotions, followed by semi-urban and the least was observed among participants from rural regions. Individuals from rural areas have different family, peer, and community contexts in comparison to people from suburban or urban regions. These varying elements and encounters may considerably impact their mental health during their adolescent years (Wang, 2018). Others factors such as problems associated with geographic isolation and poverty, transportation adversities and reduced availability to physical and mental health services that causes absence of any intervention at times of need, have all played a role in this (Heflinger, 2009).

The socio-economic elements are crucial factors of human growth. Results from the present study demonstrated that there was a difference in metaemotions and emotional regulation among the participants based on their socio-economic background. Participants from lower backgrounds had a significant difference from participants in higher and middle classes such that, they had the highest negative metaemotion and difficulties in emotional regulation while participants from upper classes had the highest positive metaemotions. Many findings have shown that better socio-economic condition of a household facilitates enhanced emotion regulation skills, intellectual functioning and mental health that also acts as a predictor of well-being and emotional management (Aber, 2000; Shankar, 2013).

ber, Jones & Cohen,

1999). Goodman (1999) found that low SES was related to

2000; Brooks-Gunn, Klebanov, Liaw & Spiker, 1993

ber, Jones & Cohen,

1999). Goodman (1999) found that low SES was related to

2000; Brooks-Gunn, Klebanov, Liaw & Spiker, 1993

CONCLUSION

In conclusion, the findings from the present study prove that Metaemotions have a

strong association with Emotional Regulation. Positive Metaemotions and Negative Metaemotions are indirectly related to each other and Negative Metaemotions have a significant direct relationship with Difficulties in Emotional Regulation. The various types of Negative Metaemotions such as Anger, Suppression, Contempt, Tough Control are directly correlated with DERS and Positive Metaemotions such as Compassionate Care and Interest are inversely correlated with DERS.

Based on the background of the participants, participants who are OVC have higher Negative Metaemotions and difficulties in Emotional Regulation followed by participants from Government schools and then by Private Schools. This shows the role of family in the development of emotional regulation among adolescents. Participants belonging to rural areas and lower social-economic status also have higher Negative Metaemotion and DERS. It can be inferred from this that an individual's social status in the

society and their financial security all have a role to play in their emotional wellbeing.

RECOMMENDATIONS

Although, the pandemic has almost come to an end and schools have reopened, it is essential to emphasise on escalating psychological interventions and targeted learning strategies for the children that enhance their mental health. It is a matter of utmost relevance to evaluate the implementation of policies which are authorised to contain the hidden effects of the pandemic on mental health of children and adolescents.

A practical implication of the findings of the present study would be to introduce interventions of metaemotional training for adolescents who are OVC and to provide them with regular programs and workshops for emotional wellbeing.

REFERENCES

- Aber, J. L., Jones, S., & Cohen, J. (2000). The impact of poverty on the mental health and development of very young children. In C. H. Zeanah, Jr. (Ed.), *Handbook of infant mental health* (pp. 113–128). The Guilford Press.
- Arundathi, S.V. (2019). A study on the emotional intelligence level among rural students in engineering institutions. *International journal of management and social science research*, 6(8), 47–51
- Bailen, N. H., Wu, H., & Thompson, R. J. (2019). Meta-emotions in daily life: Associations with emotional awareness and depression. *Emotion*, 19(5), 776.
- Beesdo, K., Pine, D. S., Lieb, R., & Wittchen, H. U. (2010). Incidence and risk patterns of anxiety and depressive disorders and categorization of generalized anxiety disorder. *Archives of general psychiatry*, 67(1), 47–57.
- Berking, M., & Wupperman, P. (2012). Emotion regulation and mental health: recent findings, current challenges, and future directions. *Current opinion in psychiatry*, 25(2), 128–134.
- Buchanan, B. (2021, July 4). *Difficulties in Emotion Regulation Scale (DERS)*. NovoPsych. <https://novopsych.com.au/assessments/multimodal/difficulties-in-emotion-regulation-scale/>
- Carmassi, C., ... & Fiorillo, A. (2020). The impact of quarantine and physical distancing following COVID-19 on mental health: study protocol of a multicentric Italian population trial. *Frontiers in psychiatry*, 11, 533.
- Casey, B. J., & Jones, R. M. (2010). Neurobiology of the adolescent brain and behavior: implications for substance use disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(12), 1189–1201.
- Chassin, L., Bountress, K., Haller, M., & Wang, F. (2014). Adolescent substance use disorders. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (pp. 180–221). The Guilford Press.
- Dinod, A. (2022, July 5). Mental Illness May be Turning into a Bigger Crisis than COVID. *The Times of India*, 5.

- Giallonardo, V., Sampogna, G., Del Vecchio, V., Luciano, M., Albert, U., Carmassi, C., Carrà, G., Cirulli, F., Dell'Osso, B., Nanni, M. G., Pompili, M., Sani, G., Tortorella, A., Volpe, U., & Fiorillo, A. (2020). The Impact of Quarantine and Physical Distancing Following COVID-19 on Mental Health: Study Protocol of a Multicentric Italian Population Trial. *Frontiers in psychiatry*, 11, 533. <https://doi.org/10.3389/fpsyt.2020.00533>
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of psychopathology and behavioral assessment*, 26(1), 41-54.
- Hallion, L. S., Steinman, S. A., Tolin, D. F., & Diefenbach, G. J. (2018). Psychometric properties of the Difficulties in Emotion Regulation Scale (DERS) and its short forms in adults with emotional disorders. *Frontiers in psychology*, 9, 539.
- Heflinger CA, Hoffman C. Double whammy? rural youth with serious emotional disturbance and the transition to adulthood. *J Rural Health*. 2009;25(4):399–406. doi: 10.1111/j.1748-0361.2009.00251.x.
- Jesline, J., Romate, J., Rajkumar, E. *et al.* The plight of migrants during COVID-19 and the impact of circular migration in India: a systematic review. *Humanit Soc Sci Commun* 8, 231 (2021). <https://doi.org/10.1057/s41599-021-00915-6>
- Kaur, R., Vinnakota, A., Panigrahi, S., & Manasa, R. V. (2018). A Descriptive Study on Behavioral and Emotional Problems in Orphans and Other Vulnerable Children Staying in Institutional Homes. *Indian journal of psychological medicine*, 40(2), 161–168. https://doi.org/10.4103/IJPSYM.IJPSYM_316_17
- Kessler, R. C., McLaughlin, K. A., Green, J. G., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., ... & Williams, D. R. (2010). Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys. *The British journal of psychiatry*, 197(5), 378-385.
- Koole S.L. The psychology of emotion regulation: An integrative review. *Cognit. Emot.* 2009;23:4–41. doi: 10.1080/02699930802619031.
- Kwon, K., Hanrahan, A. R., & Kupzyk, K. A. (2017). Emotional expressivity and emotion regulation: Relation to academic functioning among elementary school children. *School Psychology Quarterly*, 32(1), 75.
- Mansell, W., Barnes, A., Grant, L. *et al.* Do meta-emotion strategies and their effects vary in students between their family home and their university home?. *Curr Psychol* 41, 4920–4930 (2022). <https://doi.org/10.1007/s12144-020-00996-7>
- Miceli, Maria & Castelfranchi, Cristiano. (2019). Meta-emotions and the complexity of human emotional experience. *New Ideas in Psychology*. 55. 42-49. 10.1016/j.newideapsych.2019.05.001.
- Ministry of Women and Child Development. Integrated Child Protection Scheme. GOI. [Last updated on 2017 Feb 06; Last accessed on 2021 Jul 4]. Available from: <http://www.wcd.nic.in/schemes/integrated-child-protection-scheme-icps>.
- Mitmansgruber, H., Beck, T. N., Höfer, S., & Schüßler, G. (2009). When you don't like what you feel: Experiential avoidance, mindfulness and meta-emotion in emotion regulation. *Personality and Individual Differences*, 46(4), 448-453.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The Role of the Family Context in the Development of Emotion Regulation. *Social development (Oxford, England)*, 16(2), 361–388. <https://doi.org/10.1111/j.1467-9507.2007.00389.x>
- Neumann A, van Lier PAC, Gratz KL, Koot HM. Multidimensional Assessment of Emotion Regulation Difficulties in Adolescents Using the Difficulties in Emotion Regulation Scale. *Assessment*. 2010;17(1):138-149. doi:10.1177/1073191109349579

- Norman, E., & Furnes, B. (2016). The concept of "metaemotion": What is there to learn from research on metacognition?. *Emotion Review*, 8(2), 187-193.
- Phelps, C., & Sperry, L. L. (2020). Children and the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S73-S75.
- Ray, S., Goswami, V. & Kumar, C.M. Stress-The hidden pandemic for school children and adolescents in India during COVID-19 era. *Curr Psychol* (2022). <https://doi.org/10.1007/s12144-022-02827-3>
- Raposo, B., & Francisco, R. (2022). Emotional (dys)Regulation and Family Environment in (non)Clinical Adolescents' Internalizing Problems: The Mediating Role of Well-Being. *Frontiers in psychology*, 13, 703762. <https://doi.org/10.3389/fpsyg.2022.703762>
- Saleem, S., & Mahmood, Z. (2013). Risk and protective factors of emotional and behavioral problems in school children: A prevalence study. *Pakistan Journal of Psychological Research*, 239-260.
- Shankar, Binayak. (2013). Socio-economic status of family as a factor of emotion regulation and well-being. *Indian Journal of Health and Wellbeing*. 4. 1521-1524.
- Singh P (2020) Mental health of migrant laborers in COVID-19 pandemic and lockdown: challenges ahead. *Indian J Psychiatry* 233-234
- Tarkar, P. (2020). Impact of COVID-19 pandemic on education system. *International Journal of Advanced Science and Technology*, 29(9), 3812-3814.
- Wang, D., Hagedorn, A. D., McLaughlin, D. K., & Bray, B. C. (2018). Change and Stability of Emotional Health of Rural Pennsylvania Youth During High School. *The Journal of rural health : official journal of the American Rural Health Association and the National Rural Health Care Association*, 34(3), 322-332. <https://doi.org/10.1111/jrh.12296>
- Young, K. S., Sandman, C. F., & Craske, M. G. (2019). Positive and Negative Emotion Regulation in Adolescence: Links to Anxiety and Depression. *Brain sciences*, 9(4), 76. <https://doi.org/10.3390/brainsci9040076>