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Cognitive Emotion Regulation among Visually Impaired Young Adults: Insights from an Indian Context

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Abstract

This study examined cognitive emotion regulation strategies among visually impaired young adults, who face significant emotional and psychological challenges due to their disability. The aim was to investigate patterns of emotion regulation in the currently underexamined population of individuals with VI, as these are known to experience difficulties with emotion regulation compared to their sighted peers. Sixty-six visually impaired college students in the age of 20 to 30 years were assessed in a cross-sectional study using standard questionnaire for cognitive emotion regulation strategies in Lucknow. The study revealed a significant gender difference, with female scoring higher on maladaptive strategies like self-blame, catastrophizing, and blaming others. Differences in family type for only Positive Refocusing, significant differences emerged between joint and nuclear family types. The study underscores the need for targeted strategies to improve emotion regulation skills in young adults with VI, focusing on gender-specific patterns and leveraging family support.

1. INTRODUCTION

The Sustainable Development Goals (SDGs), introduced by the United Nations in 2015, emphasize inclusivity, equality, and mental well-being as critical components of global development. Of particular relevance to the visually impaired community are SDG 3, which focuses on ensuring good health and well-being, and SDG 10, which aims to reduce inequalities by fostering equitable opportunities and addressing disparities faced by marginalized populations. For visually impaired young adults, these goals underscore the necessity of strategies that enhance their cognitive and emotional resilience. The ability to regulate emotions effectively is critical to their mental health, well-being, and participation in broader societal goals. This discussion centers on the importance of cognitive emotion regulation (CER) within this group, addressing its unique challenges and aligning its development with the SDGs (Peña-Sarrionandia et al., 2015; (Brundin et al., 2021).

1.1. Understanding Visual Impairment and Its Broader Impacts

Visual impairment (VI) is defined as a visual acuity less than 6/12 that cannot be improved using refractive correction.After

distance and near vision (if required) are measured and recorded, when examining eyes we look for evidence of an abnormality. Blindness is a global public health problem affecting an estimated 36 million people who are blind and 217 million with moderate to severe visual impairment (Burton et al., 2020; Chamizo-Nieto et al., 2024).

In addition to the physical consequences, VI has a significant psychosocial impact on quality of life, social engagement, and independence causing decreasing self-esteem, emotional disturbances, and increased dependency in activities of daily living. (Chaplin & Aldao, 2013)

The transition to independence is even more daunting for the visually impaired youth. They encounter barriers, including social prejudice, limited access to resources, and restrictions on mobility, which require strong coping strategies to cope with personal, educational and vocational aspects.

1.2. Cognitive Emotion Regulation: A Critical Component of Mental Health

Emotions play a fundamental role in interpersonal communication and overall health, as they convey critical information about internal states. Emotion regulation (ER) encompasses a variety of processes—both conscious and unconscious—that enable individuals to manage emotional responses and associated physiological reactions These processes may involve strategies such as mindfulness, suppression, and avoidance, each of which influences emotions at the behavioral, physiological, and cognitive levels (Chennaz et al., 2022; Zad et al., 2022; Esmaeilinasab et al., 2016).

Cognitive Emotion Regulation (CER) represents a subset of ER that focuses specifically on conscious, thought-based strategies for managing emotional experiences. Techniques such as reappraisal, acceptance, and rumination are central to CER, which emphasizes maintaining emotional balance through adaptive cognitive processes (Extremera et al., 2019; Ezinne et al., 2022; Gupta & Rajbir, 2011).

1.3. Significance of Cognitive Emotion Regulation for Visually Impaired Individuals

In populations that face particular difficulties, including those with visual impairments, effective CER is crucial for reducing emotional distress and building resilience. While maladaptive CER techniques, like self-blame and rumination, are linked to heightened susceptibility to psychological problems, adaptive techniques, including problem-solving and positive reappraisal, have been linked to improved mental health outcomes (Hogan et al., 2014; Isaacowitz & Wolfe, 2024). The necessity for specialised therapies for visually impaired people is highlighted by research showing that the lack of visual experiences can impede the natural development of emotion management skills. For example, research shows that blind and VI children frequently perform worse on tests of emotion control than their sighted peers, highlighting the need for specialised assistance (Jahanchi & Abolghasemi, 2018; Johnson & Whisman, 2013; Jiang et al., 2021).

Adults' quality of life, job satisfaction, and social relationships are all enhanced by adaptive CER techniques. However, obstacles that visually impaired young adults face include discriminatory educational procedures, negative societal views, and a lack of mobility resources, all of which can make emotional and cognitive difficulties worse.

1.4. Gender, Age, and Family Influences on Emotion Regulation

Research demonstrates that gender significantly influences the use of CER strategies. Women are more likely to rely on rumination, a maladaptive strategy, whereas men often adopt approaches such as positive refocusing and cognitive reappraisal (Jose & Brown, 2008). Brain imaging studies further suggest that men show less prefrontal cortex activation and greater amygdala deactivation during reappraisal tasks, indicating potential differences in the cognitive effort or automaticity of these processes (Kapoor & Sethi, 2024). Additionally, women are more likely than men to employ emotional suppression (Karim et al., 2014).

Age-related differences also play a crucial role in emotion regulation. Adolescents exhibit an age-related progression in their ER abilities, with older adolescents demonstrating more advanced skills compared to younger children (Kocsel et al., 2022). Similarly, older adults tend to favor antecedent-focused strategies, such as cognitive reappraisal, over response-focused strategies like suppression, often achieving better emotional outcomes. Interestingly, older men appear to benefit more from these adaptive strategies than older women in terms of mood enhancement (Li et al., 2022). Factors such as verbal ability and situational context also influence age-related changes in CER (Masumoto et al., 2016; McRae, 2016).

The family environment and parenting styles further shape emotion regulation abilities. Authoritative parenting is associated with adaptive regulation methods, whereas authoritarian styles predict maladaptive outcomes (McRae et al., 2008). While family structure does not consistently impact CER, some findings suggest that adolescents in nuclear families may adopt more disruptive strategies, while those in joint families are more likely to exhibit adaptive behaviors like positive refocusing and planning (Najam-us-Sahar & Muzaffar, 2017; Nida et al., 2022).

These findings show the intricate interplay of gender, age, and family dynamics in developing CER strategies.

1.5. Addressing the Needs of Visually Impaired Young Adults through CER

Emotional regulation is essential for visually impaired young adults to overcome the many obstacles they encounter, such as discrimination in society, lack of access to educational resources, and sensory and motor impairments. To overcome these obstacles, focused interventions that foster emotional resilience and adaptive CER techniques are essential (Nolen-Hoeksema, 2012).

1.6. Research Questions

Q.1. Which of these cognitive emotion regulation strategies do visually impaired young adults use the most?

Q.2. Does a difference in gender exist for cognitive emotion regulation strategies among visually impaired young adults?

Q.3. What are the impacts of family type and age on adaptive and maladaptive cognitive emotion regulation strategies among visually impaired young adults?

1.7. Research Objectives

1. Identify the cognitive emotion regulation strategies of visually impaired young adults.
2. To establish gender differences in the practice of cognitive emotion regulation strategies between visually impaired young adults.
3. An investigation into whether family type and age contributes to choosing adaptive versus maladaptive strategies of cognitive emotion regulation.

1.8. Hypotheses

Ho: Age does not have a significant impact on cognitive emotion regulation strategies among visually impaired young adults.

Ho: There is no significant variation in cognitive emotion regulation strategies between male and female visually impaired young adults.

Ho: Cognitive emotion regulation strategies do not differ significantly between visually impaired young adults from nuclear families and those from joint families.

2.MATERIAL AND METHODS

2.1. Selection of subject

The study was carried out on a sample of Lucknow district, selected through multistage purposive random sampling. Method: 66 college going visually Deficient (purposeful random sampling) students were selected, among whom 42(63.33%) were male and 24(36.36%) were female.

2.2. Tools used

There were two tools for gathering data in the present study: the CERQ developed by Garnefski and a sociodemographic questionnaire developed by the authors which was used to know some characteristics about the individuals included in this research (age, gender, socio-economic status, health status and psychiatric history; family environment).

2.2.1. The Cognitive Emotion Regulation Questionnaire

The CERQ was invented by Garnefski and Kraaij in 2001 and represents a self-report measure of cognitive coping strategies that people use following exposure to traumatic life events. The CERQ consists of nine subscales, and each one represents a unique way of thinking. In total, the CERQ consists of 36 items. Participants are asked to rate the frequency that they engage in each approach on a five-point Likert scale. Alphas for most subscales were greater than 0.80. The CERQ is frequently used in both clinical and experimental settings in order to study how people regulate their emotions cognitively and the effects thereof on mental health.

2.3. Procedure

The investigation was carried out in a systematic manner by selecting sample of 66 visually handicapped students studying in various colleges of Lucknow district of Utter Pradesh by multi-stage purposive random sampling technique of which 42 were male (63.33%) and 24 were female (36.36%). Ethical issues were accented by seeking approval and consent as well as through being confidential. The tools used to gather data were as follows: the CERQ of Garnefski and Kraaij that covered nine cognitive coping strategies scored on a five-point Likert scale as well as a self-developed sociodemographic questionnaire about demographic information such as age, gender, type of family, and level of education. The instruments were applied under a controlled environment and with clear instructions, considering participants with visual impairment. The information obtained was coded and processed in descriptive and inferential statistics, which served as part of the research goals and hypotheses, and reliability and validity were certificated of the results.

3.RESULTS

Table 1: General Profile of the Respondents

			Frequency (Percentage)	Total
Age	**20-25**	Male	33(50.0%)	53(80.3%)
		Female	20 (30.3%)	
	25-30	Male	9(13.6%)	13(19.7%)
		Female	4 (6.1%)	
Family Type	**Nuclear**	Male	18(42.9%)	31(47.0%)
		Female	13(54.2%)	
	Joint	Male	24(57.1%)	35(53.0%)
		Female	11(45.8%)	
Educational Qualification	**Intermediate**	Male	7(16.7%)	10(15.2%)
		Female	3(12.5%)	
	Graduation	Male	18(42.9%)	30(45.5%)
		Female	12(50.0%)	
	Postgraduation	Male	4(9.5%)	8(12.1%)
		Female	4(16.7%)	
	Other	Male	13(31.0%)	18(27.3%)
		Female	5(20.8%)	

Table 1. presents the general profile of the respondents, including their age, family type, and educational qualifications, with frequencies and percentages provided for males and females. In terms of age, the majority of respondents aged 20-25 were males 33(50.0%) and females 20(30.3%), making up a total of 80.3%. In the 25-30 age group, there were fewer respondents, with males 9(13.6%) and females 4(6.1%), contributing to a total of 19.7%.

Regarding family type, nuclear families comprised 47.0% of the respondents, where males accounted for 18 (42.9%) and females 13 (54.2%). In joint families, which represented 53.0% of the respondents, males accounted for 24 (57.1%) and females 11 Medium, and 3 (13.0%) High, out of 23 participants. Regarding Positive Refocus, 11 (26.2%) males reported Low, 8 (19.0%) Medium, and 23 (54.8%) High, out of 42 participants. Among High, out of 42 participants. Among females, 4 (16.7%) reported Low, 2 (8.3%) Medium, and 18 (75.0%) High, out of 24 participants. Regarding Putting into Perspective, 14 (33.3%) males reported Low, 11 (26.2%) Medium, and 17 (40.5%) High, out of 42 participants. Among females, 1 (4.3%) reported Low, 15 (65.2%) Medium, and 7 (30.4%) High, (45.8%). For educational qualifications, respondents with an intermediate education constituted 15.2%, with 7 males (16.7%) and 3 females (12.5%). Those who had completed graduation made up 45.5%, including 18 males (42.9%) and 12 females (50.0%). Among respondents with postgraduate education, there were 4 males (9.5%) and 4 females (16.7%), contributing to a total of 12.1%. Lastly, under the other category, which accounted for 27.3% of respondents, 13 males (31.0%) and 5 females (20.8%) were included.

Table 2. Gender-wise Distribution of Cognitive Emotion Regulation Strategies Across Various Levels (Low, Medium, High).

		LOW		Medium		High	
		Frequency (%)	total	Frequency (%)	Total	Frequency (%)	Total
Self-Blame	Male	23(54.8%)	30(46.9%)	16(38.1%)	29(45.3%)	3(7.1%)	5(7.8%)
	Female	7(31.8%)		13(59.1.%)		2 (9.1%)	
Acceptance	Male	9(21.4%)	12(18.5%)	13(31.0%)	25(38.5%)	20(47.6%)	28(43.1%)
	Female	3(13.0%)		12(52.2%)		8(34.8%)	
Rumination	Male	8(19.0%)	13(20.0%)	26(61.9%)	41(63.1%)	8(19.0%)	11(16.9%)
	Female	5(21.7%)		15(65.2%)		3(13.0%)	
Positive Refocus	Male	11(26.2%)	11(16.7%)	8(19.0%)	18(54.8%)	23(54.8%)	37(56.1%)
	Female	0(0.0%)		10(41.7%)		14(58.3%)	
Refocus on Planning	Male	6(14.3%)	10(15.2%)	7(16.7%)	9(13.6%)	29(69.0%)	47(71.2%)
	Female	4(16.7%)		2(8.3%)		18(75.0%)	
Putting into Perspective	Male	14(33.3%)	15(23.1%)	11(26.2%)	26(40.0%)	17(40.5%)	24(36.9%)
	Female	1(4.3%)		15(65.2.0%)		7(30.4%)	
Catastrophizing	Male	22(52.4%)	26(40.0%)	18(42.9%)	33(50.8%)	2(4.8%)	6(9.2%)
	Female	4(17.4%)		15(65.2%)		4(17.4%)	
Blame Other	Male	33(78.6%)	44(66.7%)	6(14.3%)	16(24.2%)	3(7.1%)	6(9.1%)
	Female	11(45.8%)		10(41.7%)		3(12.5%)	
Reappraisal	Male	6(14.3%)	7(10.6%)	9(21.4%)	17(25.8%)	27(64.3%)	42(33.6%)
	Female	1(4.2%)		8(33.3%)		15(62.5%)	

Table 2 illustrates the distribution of Cognitive Emotion Regulation strategies among males and females, categorized into Low, Medium, and High levels, with corresponding frequencies and percentages. For Self-Blame, 23 (54.8%) males reported Low, 16 (38.1%) Medium, and 3 (7.1%) High, out of 42 participants. Among females, 7 (31.8%) reported Low, 13 (59.1%) Medium, and 2 (9.1%) High, out of 22 participants. Regarding Acceptance, 9 (21.4%) males reported Low, 13 (31.0%) Medium, and 20 (47.6%) High, out of 42 participants. Among females, 3 (13.0%) reported Low, 12 (52.2%) Medium, and 8 (34.8%) High, out of 23 participants. For Rumination, 8 (19.0%) males reported Low, 26 (61.9%) Medium, and 8 (19.0%) High, out of 42 participants. Among females, 5 (21.7%) reported Low, 15 (65.2%)

out of 23 participants. For Catastrophizing, 22 (52.4%) males reported Low, 18 (42.9%) Medium, and 2 (4.8%) High, out of 42 participants. Among females, 4 (17.4%) reported Low, 15 (65.2%) Medium, and 4 (17.4%) High, out of 23 participants. Regarding Blame Others, 33 (78.6%) males reported Low, 6 (14.3%) Medium, and 3 (7.1%) High, out of 42 participants. Among females, 11 (45.8%) reported Low, 10 (41.7%) Medium, and 3 (12.5%) High, out of 24 participants. For Reappraisal, 6 (14.3%) males reported Low, 9 (21.4%) Medium, and 27 (64.3%) High, out of 42 participants. Among females, 1 (4.2%) reported Low, 8 (33.3%) medium, and 15 (62.5%) high, out of 24 participants.

Table3: Comparative Analysis of cognitive Emotion Regulation based on age

		Mean±SD	t	Df	Sig.(2 tailed)
Self-blame	20-25	10.1698 ± 4.07967	-.913	64	.365
	25-30	11.3077 ± 3.79440			
Acceptance	20-25	13.7358 ± 4.65399	1.101	64	.275
	25-30	12.1538 ± 4.59794			
Rumination	20-25	12.8679 ±4.13725	.544	64	.588
	25-30	12.1538 ± 4.65199			
Positive-Refocusing	20-25	15.0755 ± 4.43261	.690	64	.493
	25-30	14.1538 ± 3.78255			
Refocus-on-Panning	20-25	16.3962 ± 4.83314	.263	64	.793
	25-30	16.0000 ± 5.01664			
Positive-Reappraisal	20-25	16.2642 ± 4.53682	.684	64	.497
	25-30	15.3077 ± 4.44193			
Putting-into-perspective	20-25	13.0189 ± 4.22215	-.162	64	.872
	25-30	13.2308 ± 4.24566			
Catastrophizing	20-25	10.0000 ± 4.10441	-.768	64	.446
	25-30	11.0000 ± 4.63681			

Table 3 presents the comparative analysis of Cognitive Emotion Regulation (CER) strategies between two age groups: 20–25 years and 25–30 years. Across all strategies, no statistically significant differences were observed, as all p-values exceeded the threshold of 0.05. For Self-Blame, the 25–30 age group had a slightly higher mean score (11.31 ± 3.79) compared to the 20–25 age group (10.17 ± 4.08, t = -0.913, p = .365). Similarly, for Acceptance, the 20–25 group scored higher (13.74 ± 4.65) than the 25–30 group (12.15 ± 4.60, t = 1.101, p = .275). For Rumination, the 20–25 group scored slightly higher (12.87 ± 4.14) compared to the 25–30 group (12.15 ± 4.65, t = 0.544, p = .588). In Positive Refocusing, Refocus on Planning, and Positive Reappraisal, the 20–25 group consistently showed marginally higher mean scores, with no significant differences. For Catastrophizing, the 25–30 group scored slightly higher (11.00 ± 4.64) compared to the 20–25 group (10.00 ± 4.10, t = -0.768, p = .446). Lastly, for Blaming Others, both groups reported similar scores, with the 20–25 group at 8.02 ± 5.18 and the 25–30 group at 7.92 ± 3.97 (t = 0.062, p = .951). These findings suggest that age-related variations in CER strategies are minimal within this sample.

Table 4: Comparative Analysis of Cognitive Emotion Regulation Based on Gender

		Mean ±	t	df	Sig. (2-tailed)
Self-blame	Male	9.5476 ± 3.43726	-2.337	64	.023
	Female	11.8750 ± 4.59028			
Acceptance	Male	13.4286 ± 5.10448	.011	64	.991
	Female	13.4167 ± 3.83255			
Rumination	Male	12.8095 ± 4.16863	.208	64	.836
	Female	12.5833 ± 4.38294			
Positive-Refocusing	Male	14.1905 ± 4.70722	-1.978	64	.052
	Female	16.1250 ± 3.20750			
Refocus-on-Panning	Male	16.4524 ± 4.82475	.296	64	.768
	Female	16.0833 ± 4.94242			
Positive-Reappraisal	Male	16.0000 ± 4.62759	-.180	64	.858
	Female	16.2083 ± 4.36368			
Putting-into-perspective	Male	12.6905 ± 4.68775	-1.053	64	.296
	Female	13.7083 ± 3.14130			
Catastrophizing	Male	9.1905 ± 3.42329	-2.700	64	.009
	Female	11.9583 ± 4.87656			
Blaming Others	Male	6.9524 ± 3.90717	-2.105	64	.043
	Female	9.8333 ± 6.01929			

Table 4 presents a comparative analysis of CER strategies between males and females. Notable gender differences were identified in three strategies: Self-Blame, Catastrophizing, and Blaming Others. Females demonstrated significantly higher scores than males in Self-Blame (11.88 ± 4.59 vs. 9.55 ± 3.44, t = -2.337, p = .023), Catastrophizing (11.96 ± 4.88 vs. 9.19 ± 3.42, t = -2.700, p = .009), and Blaming Others (9.83 ± 6.02 vs. 6.95 ± 3.91, t = -2.105, p = .043).

For the remaining strategies, no significant differences were found. Both genders showed similar mean scores in Acceptance (Male: 13.43 ± 5.10; Female: 13.42 ± 3.83, t = 0.011, p = .991), Rumination (Male: 12.81 ± 4.17; Female: 12.58 ± 4.38, t = 0.208,

p = .836), Refocus on Planning (Male: 16.45 ± 4.82; Female: 16.08 ± 4.94, t = 0.296, p = .768), and Positive Reappraisal (Male: 16.00 ± 4.63; Female: 16.21 ± 4.36, t = -0.180, p = .858). Although females scored slightly higher in Positive Refocusing (16.13 ± 3.21 vs. 14.19 ± 4.71, t = -1.978, p = .052) and Putting into Perspective (13.71 ± 3.14 vs. 12.69 ± 4.69, t = -1.053, p = .296), these differences were not statistically significant.

Overall, the data suggest notable gender differences in certain maladaptive strategies like Self-Blame, Catastrophizing, and Blaming Others, while other strategies showed no significant variation between males and females.

Table 5: Comparative Analysis of Cognitive Emotion Regulation Based on Family Type

		Mean ±	t	df	Sig. (2-tailed)
Self-blame	Nuclear	9.5476 ± 4.06929	-1.371	64	.175
	Joint	11.8750 ± 3.92942			
Acceptance	Nuclear	13.4286 ± 4.95138	1.152	64	.254
	Joint	13.4167 ± 4.34403			
Rumination	Nuclear	12.8095 ± 4.07246	1.565	64	.123
	Joint	12.5833 ± 4.25293			
Positive-Refocusing	Nuclear	14.1905 ± 4.26615	2.012	64	.048
	Joint	16.1250 ± 4.14709			
Refocus-on-Planning	Nuclear	16.4524 ± 4.39844	1.569	64	.122
	Joint	16.0833 ± 5.09523			
Positive Reappraisal	Nuclear	16.0000 ± 4.00993	2.118	64	.038
	Joint	16.2083 ± 4.69042			
Putting-into- perspective	Nuclear	12.6905 ± 3.97438	-.226	64	.822
	Joint	13.7083 ± 4.43572			
Catastrophizing	Nuclear	9.1905 ± 4.91891	-.474	64	.637
	Joint	11.9583 ± 3.49189			
Blaming Other	Nuclear	6.9524 ± 5.77853	-.797	64	.429
	Joint	9.8333 ± 4.08975			

Table 5 provides a comparative analysis of Cognitive Emotion Regulation (CER) strategies between individuals from nuclear and joint families. Significant differences were observed for Positive Refocusing and Positive Reappraisal, favoring individuals from joint families. Positive Refocusing scores were higher for individuals from joint families (16.13 ± 4.15) compared to those from nuclear families (14.19 ± 4.27, t = 2.012, p = .048). Similarly, Positive Reappraisal scores were significantly higher for joint family participants (16.21 ± 4.69) compared to nuclear family participants (16.00 ± 4.01, t = 2.118, p = .038).

For other CER strategies, no significant differences were found. While individuals from joint families reported slightly higher mean scores for Self-Blame (11.88 ± 3.93 vs. 9.55 ± 4.07, t = -1.371, p = .175) and Catastrophizing (11.96 ± 3.49 vs. 9.19 ± 4.92, t = -0.474, p = .637), these differences were not statistically significant. Similarly, Acceptance (Nuclear: 13.43 ± 4.95; Joint: 13.42 ± 4.34, t = 1.152, p = .254), Rumination (Nuclear: 12.81 ± 4.07; Joint: 12.58 ± 4.25, t = 1.565, p = .123), Refocus on Planning (Nuclear: 16.45 ± 4.40; Joint: 16.08 ± 5.10, t = 1.569, p = .122), Putting into Perspective (Nuclear: 12.69 ± 3.97; Joint: 13.71 ± 4.44, t = -0.226, p = .822), and Blaming Others (Nuclear: 6.95 ± 5.78; Joint: 9.83 ± 4.09, t = -0.797, p = .429) did not show statistically significant variation based on family type.

The findings suggest that while family type plays a role in fostering adaptive strategies like Positive Refocusing and Positive Reappraisal, other CER strategies do not significantly differ between individuals from nuclear and joint families.

4. DISCUSSION

The goal of the current study was to investigate the cognitive emotion control techniques used by young adults with visual impairments and to look at how gender, family structure, and age affect both adaptive and maladaptive techniques.

The findings of this study provide valuable insights into the cognitive emotion regulation (CER) strategies utilized by visually impaired young adults and underscore the significant role of gender, family type, and educational qualifications in shaping these strategies. Aligning with the Sustainable Development Goals (SDGs) 3 and 10, which emphasize mental well-being and reducing inequalities, this research highlights the necessity of promoting adaptive CER strategies for enhancing resilience and overall mental health in this population.

4.1. Prevalence of CER Strategies

The results demonstrate varied use of CER strategies among visually impaired young adults, with notable gender differences. For instance, females were more inclined towards rumination and acceptance at moderate levels, while males exhibited higher tendencies for strategies like self-blame and blame others. These findings align with previous research by (Johnson & Whisman,.2013.; Orgeta, 2009). which identified significant gender disparities in CER strategies, with women more prone to maladaptive strategies like rumination. Research indicates that women are more likely to ruminate on their depressive symptoms than men, reflecting a similar gender distribution to depression itself (Palmieri et al., 2022; Ratnasari & Suleeman, 2017). However, multiple meta-analyses have found that the gender differences in rumination are relatively small in magnitude (Rauf et al., 2023; Rood et al., 2009; Almeida & Sousa, 2022). These gender differences in rumination may begin as early as age 12 (Saleem & Gul, 2018), potentially leading to lower well-being and higher risk for the development of emotional disorders among girls (Sanchis-Sanchis et al., 2020; Tamres et al., 2002). This gendered divergence suggests the need for tailored interventions that address specific emotional regulation needs for males and females.

Moreover, adaptive strategies such as positive refocusing and refocusing on planning were more prevalent among males, particularly at higher levels (Troy et al., 2018). These strategies are crucial for fostering resilience and facilitating better adjustment in educational and social contexts, as highlighted in studies by (Gupta & Rajbir, 2011; (Hogan et al., 2014). Females, on the other hand, exhibited a higher inclination toward adaptive strategies like positive reappraisal, suggesting their potential for achieving emotional balance through cognitive restructuring.

One important factor influencing CER tactics was the home context. Participants from joint families tended to use adaptive strategies like planning and positive refocusing, whereas those from nuclear families showed a greater reliance on disruptive tactics like self-blame and catastrophising. Research by Saleem & Gul, 2018 (Nida et al., 2022). that emphasises the beneficial function of mixed family systems in fostering emotional resilience, is consistent with our findings (United Nations, 2015; Vaishali et al., 2020; (Wang & Yin, 2023)

Strong social support from joint families can help vision impaired people cope with stress and develop adaptive CER techniques. Gender-wise Distribution of Cognitive Emotion Regulation Educational attainment was identified as a significant factor in the adoption of CER strategies. Individuals with higher levels of education tended to utilize adaptive strategies like planning refocus and positive reappraisal more frequently. These results are consistent with the findings of Karim et al., 2014 (McRae et al., 2008).

·Strategies Across Various Levels (Low, Medium, High). who emphasize the role of education in equipping individuals with problem-solving skills and emotional resilience. Educational interventions can thus serve as a platform for fostering adaptive CER strategies, enabling visually impaired young adults to navigate the challenges of societal prejudice and accessibility barriers more effectively.

4.2. Challenges and Implications

Young adults with visual impairments deal with a variety of issues, such as social stigma, restricted mobility, and unavailable educational options. The study's conclusions highlight the pressing need for focused initiatives to deal with these problems. Programs such as Cognitive Behavioral Therapy (CBT), Acceptance and Commitment Therapy (ACT), and mindfulness training have demonstrated efficacy in enhancing CER strategies and psychological well-being (Nolen-Hoeksema, 2012).

Additionally, incorporating adaptive CER training into educational curricula and community programs can empower visually impaired individuals to overcome emotional and cognitive challenges.

The observed differences in CER strategies by gender and family type also call for culturally sensitive approaches that consider familial and societal dynamics. For example, integrating family-based interventions can enhance the emotional support provided by nuclear and joint family systems, fostering a more adaptive emotional regulation environment for visually impaired young adults.

4.3. Alignment with the SDGs

This study aligns with SDG 3 by emphasizing the importance of mental well-being and SDG 10 by addressing inequalities faced by visually impaired individuals. By identifying and promoting adaptive CER strategies, this research contributes to reducing psychological distress and enhancing the inclusion of visually impaired young adults in educational and professional domains. Future policies should integrate these findings to create inclusive environments that support the mental health and emotional resilience of marginalized populations.

5. CONCLUSION

This study underscores the critical role of CER strategies in promoting mental health and resilience among visually impaired young adults. By addressing the gendered, familial, and educational influences on CER, the findings offer a pathway for developing targeted interventions that align with the SDGs. As the global community continues to strive for inclusivity and mental well-being, fostering adaptive CER strategies will remain a cornerstone for empowering visually impaired individuals to achieve their full potential.

6. LIMITATIONS AND FUTURE DIRECTIONS

Although the study offers insightful information, it has limitations. Only visually impaired college students in Lucknow were included in the sample, which limited the findings' generalisability. To validate and build upon these findings, future research should look at larger, more diverse samples.

Longitudinal studies are also required to investigate the long-term effects of adaptive CER strategies on psychological well-being and societal integration. Additionally, more research should look at the interactions between cultural factors, social support systems, and CER strategies. By comprehending these dynamics, more comprehensive interventions that address the particular difficulties faced by visually impaired people in various contexts can be developed.

7. REFERENCES

- Almeida, O. F. X., & Sousa, N. (2022). Leveraging Neuroscience to Fight Stigma Around Mental Health [Review of Leveraging Neuroscience to Fight Stigma Around Mental Health]. Frontiers in Behavioral Neuroscience, 15. Frontiers Media. https://doi.org/10.3389/fnbeh.2021.812184
- Brundin, E., Liu, F., & Cyron, T. (2021). Emotion in strategic management: A review and future research agenda. *Long Range Planning*, *55*(4), 102144. https://doi.org/10.1016/j.lrp.2021.102144
- Burton, M. J., Ramke, J., Marques, A. P., Bourne, R. R. A., Congdon, N., Jones, I., ... & Ackland, P. (2020). The Lancet Global Health Commission on global eye health: vision beyond 2020. The Lancet Global Health, 9(4), e489-e551.
- Chamizo-Nieto, M. T., Arrivillaga, C., Gómez-Hombrados, J., & Rey, L. (2024). Preventing cyberbullying in victims: What role do cognitive coping strategies play in boys and girls? *Children and Youth Services Review*, *163*, 107751. https://doi.org/10.1016/j.childyouth.2024.107751
- Chaplin, T. M., & Aldao, A. (2013). Gender differences in emotion expression in children: a meta-analytic review. *Psychological bulletin*, *139*(4), 735.
- Chennaz, L., Valente, D., Baltenneck, N., Baudouin, J. Y., & Gentaz, E. (2022). Emotion regulation in blind and visually impaired children aged 3 to 12 years assessed by a parental questionnaire. *Acta psychologica*, *225*, 103553. https://doi.org/10.1016/j.actpsy.2022.103553
- Esmaeilinasab, M., Khoshk, A. A., & Makhmali, A. (2016b). Emotion regulation and life satisfaction in university Students: Gender differences. ˜the œEuropean Proceedings of Social & Behavioural Sciences. https://doi.org/10.15405/epsbs.2016.11.82
- Extremera, N., Quintana-Orts, C., Sánchez-Álvarez, N., & Rey, L. (2019). The Role of Cognitive Emotion Regulation Strategies on Problematic Smartphone Use: Comparison between Problematic and Non-Problematic Adolescent Users. International Journal of Environmental Research and Public Health, 16(17), 3142. https://doi.org/10.3390/ijerph16173142
- Ezinne, N. E., Bhattarai, D., Ekemiri, K. K., Harbajan, G. N., Crooks, A. C., Mashige, K. P., Ilechie, A. A., Zeried, F. M., & Osuagwu, U. L. (2022). Demographic profiles of contact lens wearers and their association with lens wear characteristics in Trinidad and Tobago: A retrospective study. *PLoS ONE*, *17*(7), e0264659. https://doi.org/10.1371/journal.pone.0264659
- Gupta, L., Rajbir, S. (2011).Impact ofFamily Type on Resilience.(Online).https://www.researchgate.net. Diakses pada tanggal 24februari 2017
- Hogan, C. L., Catalino, L. I., Mata, J., & Fredrickson, B. L. (2014). Beyond emotional benefits: Physical activity and sedentary behaviour affect psychosocial resources through emotions. *Psychology and Health*, *30*(3), 354-369. https://doi.org/10.1080/08870446.2014.973410
- Isaacowitz, D. M., & Wolfe, H. E. (2024). Emotion Regulation Tactics: A Key to Understanding Age (and Other Between- and Within-Person) Differences in Emotion Regulation Preference and Effectiveness. *Emotion review : journal of the International Society for Research on Emotion*, *16*(4), 252-264. https://doi.org/10.1177/17540739241259567
- Jahanchi, M., & Abolghasemi, S. (2018). The role of cognitive emotion regulation, resilience, and sleep disorders in predicting suicidal ideation of addicts under treatment. Avicenna Journal of Neuro Psych Physiology, 5(3), 99-106. https://doi.org/10.32598/ajnpp.5.3.99
- Jiang et al., 2021 Jiang, X., Ji, L., Chen, Y., Zhou, C., Ge, C., & Zhang, X. (2021). How to Improve the Well-Being of Youths: An Exploratory Study of the Relationships Among Coping Style, Emotion Regulation, and Subjective Well-Being Using the Random Forest Classification and Structural Equation Modeling. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.637712
- Johnson, D. P., & Whisman, M. A. (2013). Gender differences in rumination: A meta-analysis. *Personality and individual differences*, *55*(4), 367-374. https://doi.org/10.1016/j.paid.2013.03.019
- Jose, P. E., & Brown, I. (2008). When does the gender difference in rumination begin? Gender and age differences in the use of rumination by adolescents. *Journal of Youth and Adolescence*, *37*, 180-192.
- Kapoor, T., & Sethi, S. R. (2024). The Impact of Family Environment on Self-esteem and Resilience among College Day Scholars and Hostellers » The International Journal of Indian Psychology. *International Journal of Indian Psychology*. https://doi.org/10.25215/1202.122
- Karim, A.R., Sharafat, T., & Mahmud, A.Y. (2014). Cognitive Emotion Regulation in Children Is Attributable to Parenting Style, Not to Family Type and Child's Gender. World Academy of Science, Engineering and Technology, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, 7, 498-505.
- Kocsel, N., Köteles, F., Galambos, A., & Kökönyei, G. (2022). The interplay of self-critical rumination and resting heart rate variability on subjective well-being and somatic symptom distress: A prospective study. *Journal of Psychosomatic Research*, *152*, 110676.
- Li, D., Chan, V. F., Virgili, G., Piyasena, P., Negash, H., Whitestone, N., O'Connor, S., Xiao, B., Clarke, M., Cherwek, D. H., Singh, M. K., She, X., Wang, H., Boswell, M., Prakalapakorn, S. G., Patnaik, J. L., & Congdon, N. (2022). Impact of vision impairment and ocular morbidity and their treatment on depression and anxiety in children. *Ophthalmology*, *129*(10),11521170. https://doi.org/10.1016/j.ophtha.2022.05.020
- Masumoto, K., Taishi, N., & Shiozaki, M. (2016). Age and Gender Differences in Relationships Among Emotion Regulation, Mood, and Mental Health. Gerontology and Geriatric Medicine, 2. https://doi.org/10.1177/2333721416637022
- McRae, K. (2016). Cognitive emotion regulation: A review of theory and scientific findings. Current Opinion in Behavioral Sciences, 10, 119-124. https://doi.org/10.1016/j.cobeha.2016.06.004
- McRae, K., Ochsner, K. N., Mauss, I. B., Gabrieli, J. J. D., & Gross, J. J. (2008). Gender Differences in Emotion Regulation: An FMRI Study of Cognitive Reappraisal. Group Processes & Intergroup

- Najam-us-Sahar, Muzaffar N. Role of family system, positiveemotions and resilience in social adjustment among Pakistaniadolescents. J Educ Health Community Psychol 2017;6(2):46–58
- Nida, Riaz., Hina, Iram., Amna, Ali, Hussien, Hassan., Nazia, Iqba., Laulaak, Fatima. (2022). Improving emotional dysregulation and well-being among visually challenged adolescents: efficacy of acceptance and commitment therapy (act). Asean Journal of Psychiatry, 23(1) doi: 10.54615/2231-7805.47235
- Nolen-Hoeksema, S. (2012). Emotion regulation and psychopathology: The role of gender. *Annual review of clinical psychology*, *8*(1), 161-187.
- Orgeta, V. (2009). Specificity of age differences in emotion regulation. Aging & Mental Health, 13(6), 818-826. https://doi.org/10.1080/13607860902989661
- Palmieri, A., Fernandez, K. C., Cariolato, Y., Kleinbub, J. R., Salvatore, S., & Gross, J. J. (2022). Emotion Regulation in Psychodynamic and Cognitive-Behavioural Therapy: An Integrative Perspective. *Clinical neuropsychiatry*, *19*(2), 103-113. https://doi.org/10.36131/cnfioritieditore20220204
- Peña-Sarrionandia, A., Mikolajczak, M., & Gross, J. J. (2015). Integrating emotion regulation and emotional intelligence traditions: a meta-analysis. *Frontiers in psychology*, *6*, 160. https://doi.org/10.3389/fpsyg.2015.00160
- Ratnasari, S., & Suleeman, J. (2017a). Perbedaan Regulasi Emosi Perempuan dan Laki-Laki di Perguruan Tinggi. Jurnal Psikologi Sosial, 15(1). https://doi.org/10.7454/jps.2017.4
- Rauf, U., Kazmi, S. M. A., & Rafi, A. A. (2023a). Role of cognitive emotion regulation strategies and family structure as determinants of aggression in pakistani adolescents. Pakistan Journal of Social Research, 05(02), 240–249. https://doi.org/10.52567/pjsr.v5i02.1131
- Rood L, Roelofs J, Bogels SM, Nolen-Hoeksema S, Schouten E. The influence of emotion-focused rumination and distraction on depressive symptoms in non-clinical youth: A meta-analytic review. Clinical Psychology Review. 2009;29:607–616. doi: 10.1016/j.cpr.2009.07.001.
- Saleem, T., & Gul, S. (2018b). Use of emotion regulation strategies across family systems. *International Journal of Mental Health*, *47*(3), 228-235. https://doi.org/10.1080/00207411.2018.1485459
- Sanchis-Sanchis, A., Grau, M. D., Moliner, A., & Morales-Murillo, C. P. (2020). Effects of age and gender in emotion regulation of children and Adolescents. Frontiers in Psychology, 11. https://doi.org/10.3389/fpsyg.2020.00946
- Tamres, L. K., Janicki, D., & Helgeson, V. S. (2002). Sex differences in coping behavior: A meta-analytic review and an examination of relative coping. *Personality and social psychology review*, *6*(1), 2-30.
- Troy, A. S., Shallcross, A. J., Brunner, A., Friedman, R., & Jones, M. C. (2018). Cognitive reappraisal and acceptance: Effects on emotion, physiology, and perceived cognitive costs. *Emotion (Washington, D.C.)*, *18*(1), 58–74. https://doi.org/10.1037/emo0000371
- *United nation. (2015),Transforming our world: the 2030 Agenda for Sustainable Development, Department of Economic and Social Affairs*. (n.d.-b). https://sdgs.un.org/2030agenda
- Vaishali, K., P, V., & SASIPRIYA/ ARAVIND EYE CARE SYSTEM. (2020). Understanding definitions of visual impairment and functional vision. In *COMMUNITY EYE HEALTH JOURNAL SOUTH ASIA* (Vol. 33, Issue 110). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8115704/pdf/jceh_33_110_S16.pdf
- Wang, Y. X., & Yin, B. (2023). A new understanding of the cognitive reappraisal technique: an extension based on the schema theory. *Frontiers in behavioral neuroscience*, *17*, 1174585. https://doi.org/10.3389/fnbeh.2023.1174585
- Zad, S., Jimenez, J., & Finlayson, M. A. (2022b). The ABBE Corpus: Animate Beings Being Emotional. arXiv (Cornell University). https://doi.org/10.48550/arXiv.2201.10618