



Mediating Role of Emotional Intelligence between Cognitive Flexibility and Resilience in Young and Middle-aged Adults

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Abstract

The purpose of this research was to investigate whether Emotional Intelligence acts as a mediator between Cognitive Flexibility and Cognitive Resilience in young and middle-aged adults. It was a quantitative study with a cross-sectional mediational analysis design. The research considered emotional intelligence as a whole and also its subcomponents as identified by Daniel Goleman. These include self-motivation, self-awareness, emotional regulation, social motivation, social skills and emotional receptivity. Thus, the study examined seven mediations in all. The sample size was 78, with 38 young adults (aged 18-25) and 40 middle-aged adults (aged 40-55). The methodology involved the online circulation of three questionnaires, one for each of the variables. The collected data was subjected to mediational analysis. Contrary to the hypothesis, emotional intelligence was found to have a significant mediating effect between cognitive flexibility and cognitive resilience in young adults but not in middle-aged adults. Additionally, emotional regulation and self-motivation were also found to be significant mediators in young adults. On the contrary, neither emotional intelligence nor its subcomponents had a significant mediating effect in the case of middle-aged adults. Future research can focus on other probable mediators between cognitive flexibility and cognitive resilience.

Keywords: cognitive flexibility, cognitive resilience, emotional intelligence, positive neuropsychology, cognitive psychology.

Introduction

Our brain is an orchestra of abilities in which cognitive flexibility enables a person to adapt to the tempo of the orchestral music (Reddy, 2024). In other words, cognitive flexibility facilitates mental adaptation to the surrounding environmental changes. It is composed of abilities like attention shifting, reversal learning and task switching, to name a few. The impairment of cognitive flexibility is implicated in disorders like Autism Spectrum Disorder (Hughes et al., 1994), Schizophrenia (Murray et al., 2018) and Obsessive-Compulsive Disorder (Gottwald et al., 2018).

Emotional intelligence, the mediating variable in this study, has been defined by Daniel Goleman as “The capacity to recognize, understand, and manage one's own emotions while also being able to recognize, understand, and influence the emotions of others.” The components of emotional intelligence identified by him are self-awareness, self-motivation, emotional regulation, social awareness, social skills and emotional receptivity (Goleman, 1995). Chapman and Hayslip Jr. (2006) reported that the developmental trajectory of the various aspects of emotional intelligence is uneven throughout adulthood. For instance, they found that emotional regulation may improve with age but emotion perception may not.

Cognitive resilience refers to the brain's ability to adapt, recover, or maintain optimal cognitive functioning in the face of challenges such as stress, adversity, or neurological damage. The prefrontal cortex, amygdala, hippocampus, and neurotransmitters foster cognitive resilience (Conte et al., 2023). Factors affecting resilience include locus of control, self-concept, social and personal resources, altruism, and connection with the community (Vasquez et al., 2019).

The two sample groups in this research are young and middle-aged adults. Early adulthood is an age of exploration in the personal and professional domains of life. Thus, cognitive flexibility tends to be higher in early adulthood than in the later stages (Craik and Bialystok, 2006), enabling individuals to adapt to novel environments. Neuroplasticity and the peak of executive functioning in this stage also contribute to this flexibility (Kolb and Gibb, 2011; Tong et al., 2024). Fluid intelligence, which is also high in early adulthood, is closely linked to cognitive flexibility (Cattell and Horn, 1967).

As for middle-aged adults, it is reported that owing to factors like cognitive decline and a reduction in dopamine and neuroplasticity, individuals may show lesser cognitive flexibility than young adults (Li et al., 2001; Cohen-Shikora et al., 2018). However, the socioemotional selectivity theory suggests that as people age, they prioritize emotional well-being. Thus, middle adulthood

is associated with improved emotional regulation and resilience, which are critical components of emotional intelligence (Cabello et al., 2016).

Important to the present topic, there has been evidence of cognitive flexibility as a crucial predictor in generating cognitive resilience. Ram et al. (2022) found that while cognitive resilience influenced the academic performance of Turkish students during COVID-19, cognitive flexibility moderated its effect. It was also found to be an important predictor of resilience in a cross-sectional study on Indonesian adolescents. Moreover, there is a general agreement that emotional intelligence enhances resilience through skills like reflective ability, insight, social competence and empathy (Vasquez et al., 2019).

Unlike cognitive flexibility, the developmental trajectory of emotional intelligence is yet to be sufficiently explored (Chapman and Hayslip Jr., 2006). Notebaert et al. (2024), in their study comprising undergraduate students, could not find a direct relationship between cognitive flexibility and resilience. Thus, they recommended the investigation of emotional and social factors that might underscore this relationship. Research on resilience has frequently focused on psychological resilience, a broader entity, rather than cognitive resilience, a more specific aspect. Studying cognitive resilience is essential as it helps prevent or delay the onset of neurodegenerative disorders (Khudeish et al., 2024).

Materials and Methods

Research Goals

Drawing from past research, the primary goal of the present study was to investigate the role of emotional intelligence as a mediator in the relationship between cognitive flexibility and cognitive resilience in young and middle-aged adults. Emotional intelligence was not examined only as a unitary entity but also as a combination of the six sub-domains identified by Goleman (self-awareness, self-motivation, emotional regulation, social awareness, social skills and emotional receptivity). The second goal was to compare the extent of mediation by emotional intelligence and its sub-domains between the chosen age groups.

Research Hypotheses

H_1 - Emotional intelligence significantly mediates the relationship between Cognitive Flexibility and Cognitive Resilience in the young and middle-aged adults.

H_{1a} - Emotional regulation significantly mediates the relationship between Cognitive Flexibility and Cognitive Resilience in young and middle-aged adults.

H_{1b} - Self-awareness significantly mediates the relationship between Cognitive Flexibility and Cognitive Resilience in the young and middle-aged adults.

H_{1c} - Self-motivation significantly mediates the relationship between Cognitive Flexibility and Cognitive Resilience in the young and middle-aged adults.

H_{1d} - Social Awareness significantly mediates the relationship between Cognitive Flexibility and Cognitive Resilience in the young and middle-aged adults.

H_{1e} - Social skills significantly mediate the relationship between Cognitive Flexibility and Cognitive Resilience in the young and middle-aged adults.

H_{1f} - Emotional Receptivity significantly mediates the relationship between Cognitive Flexibility and Cognitive Resilience in the young and middle-aged adults.

H_2 - The mediating effect of emotional intelligence is higher in middle-aged adults than in young adults.

Research Sample

The sample comprised young adults (aged 18 - 25 years) and middle-aged adults (aged 40 - 55 years). The sample size was 78 with 38 young adults and 40 middle-aged adults. The participants belonged to various metropolitan cities of India.

There were three eligibility criteria for participation. First, this research was conducted only on healthy individuals, those without any diagnosed psychological or psychiatric condition. Second, the participants were required to have a minimum education up to the 12th grade as the level of education plays a role in the availability of cognitive flexibility (Rohwedder and Willis, 2010). In India, passing the 12th grade marks the completion of formal schooling and it is the minimum qualification for admission to a university. Lastly, the respondents were required to have an average level of English proficiency as the questionnaires were administered in English.

Measures

The Cognitive Flexibility Scale by Dennis and Wander Val (2010) was used to measure cognitive flexibility. It is a 20-item self-report measure that comprises a 7-point rating scale where 1 indicates 'strongly disagree,' and 7 indicates 'strongly agree.' The higher the score on this scale, the greater the person's cognitive flexibility. Items 2,4,7,9,11, and 17 are reverse-coded. The scale has a high test-retest reliability ($r = 0.81$). It has a Cronbach's alpha of 0.90 and convergent

construct validity with other measures of cognitive flexibility, depressive symptomatology, and coping.

The Emotional Intelligence Scale by Mehta and Singh (2013) was used to assess emotional intelligence and its six domains. It is a 69-item self-report measure that uses a 5-point Likert scale where 1 indicates 'extremely low competence,' and 5 indicates 'extremely high competence.' The raw scores on the individual domains of the scale were converted to sten scores. The scale had a reliability coefficient value of 0.91, while the reliability coefficient values of its six subscales ranged between 0.78 to 0.91. Items 12, 22, 24, 34, 38, 57 and 69 are reverse-coded. The higher the score on this scale, the higher is the emotional intelligence.

The Cognitive Resilience Scale by Smith (2015) was used to assess cognitive resilience. It is a 10-item self-report measure of cognitive resilience that uses a 5-point Likert scale where 1 indicates 'strongly disagree' and 5 indicates 'strongly agree.' Scoring involves adding up the scores on all 10 items and dividing the sum by 10. The higher the score, the greater the cognitive resilience. The scale has a Cronbach's alpha of 0.89 (Ram et al., 2022). This scale correlates highly with the Brief Resilience Scale and is a predictor of optimism about the future, life-goal tracking, satisfaction with productivity and effectiveness, and living according to core values.

Procedure

This was a quantitative study with a cross-sectional mediational analysis design. An informed consent form, describing the topic and intention of the study, as well as the eligibility criteria for participation, was circulated online to prospective participants. It gave the participants the liberty to quit the research procedure at any time. Additionally, they were assured that should they find any items in any of the three scales inappropriate to answer, they could omit the item/s. In such a case, their data would be discarded.

Data privacy was maintained and the collected data was not used for anything other than the purpose of this research. This study refrained from obtaining any privacy-breaching visual or auditory pieces of information such as photographs or voice notes of participants. Every participant's name was coded before their responses for data analysis.

After receiving the consent of the participants, three scales, measuring the three variables of the study, namely Cognitive Flexibility, Emotional Intelligence and Cognitive Resilience, were administered. A digital version of these forms was sent online to the respondents.

The data obtained was analysed both descriptively and inferentially. Descriptive statistics were used to check the overall spread and normality of the data. Accordingly, scales with data deviating from the normal were subjected to bootstrapping instead of the standard mediational analysis.

Inferential analysis was performed to test the hypotheses of the research and assess the mediating role of emotional intelligence and its subcomponents in both age groups. A significance level of ($p < .05$) was considered for this. All the statistical analyses were done using Jamovi software.

The study was approved by the Center for Research, Christ (Deemed to be) University, Bengaluru, India, with the number, CU: RCEC/00642/07/25.

Results

Table 1

Demographic details of participants

Demographics	Numerical Strength	Mean (age)	<i>SD</i> (age)	Median(age)
Young adults	38	21	1.27	21
Middle-aged adults	40	47.3	4.60	48
Males	21	----	----	----
Females	57	----	----	----

Table 2

Descriptive Statistics for the Data Distribution of Thirty-eight Young Adults

Variables	Mean	SD	Shapiro-Wilk <i>W</i>	Shapiro-Wilk <i>p</i>
Cognitive flexibility	107	13.2	0.958	0.165
Cognitive resilience	3.31	0.449	0.978	0.662
Emotional regulation	5.5	2.04	0.939	0.04
Self-awareness	5.55	1.9	0.965	0.271
Self-motivation	5.53	1.96	0.96	0.193
Social awareness	5.53	2.01	0.948	0.079
Social skills	5.5	1.94	0.951	0.093
Emotional receptivity	5.47	2.09	0.974	0.501

The table above depicts the descriptive statistics of the distribution of the scores of young adults on the three scales (cognitive flexibility, emotional intelligence and cognitive resilience) administered to them. Shapiro-Wilk tests of normality were conducted for the distribution of the scores. The data were largely normally distributed with the exception of the Emotional Regulation subscale ($W = 0.939$; $p < 0.05$).

The descriptive statistical values of all the subscales of the Emotional Intelligence questionnaire are as follows: Emotional Regulation- ($M = 5.50$; $SD = 2.04$), Self-Awareness- ($M = 5.55$; $SD = 1.90$), Self-Motivation- ($M = 5.53$; $SD = 1.96$), Social Awareness- ($M = 5.53$; $SD = 2.01$), Social Skills- ($M = 5.50$; $SD = 1.94$), and Emotional Receptivity ($M = 5.47$; $SD = 2.09$).

The means for the two cognition-oriented scales, namely cognitive flexibility and cognitive resilience, were ($M = 107$; $SD = 13.2$) and ($M = 3.31$; $SD = 0.45$), respectively. All variables showed consistent central tendencies, with means and medians closely aligned, suggesting no substantial skew.

Table 3

Descriptive Statistics for the Data Distribution of Forty Middle-aged Adults

Variable	Mean	SD	Shapiro-Wilk <i>W</i>	Shapiro-Wilk <i>p</i>
Cognitive flexibility	109	14.2	0.959	0.15
Cognitive resilience	3.54	0.479	0.968	0.308
Emotional regulation	5.58	2.04	0.939	0.031
Self-awareness	5.58	1.92	0.948	0.064
Self-motivation	5.33	1.99	0.944	0.049
Social awareness	5.63	2.02	0.93	0.016
Social skills	5.47	2.08	0.97	0.371
Emotional receptivity	5.4	2.15	0.963	0.217

The table above shows the descriptive statistics of the distribution of the scores of middle-aged adults on the three scales (cognitive flexibility, emotional intelligence and cognitive resilience) administered to them. The Shapiro-Wilk tests of normality show that the data was normally distributed with the exception of the Emotional Regulation ($W = 0.939$; $p < 0.05$), Self-Motivation ($W = 0.944$; $p < 0.05$) and Social Awareness ($W = 0.93$; $p < 0.05$) subscales.

The descriptive statistical values of the subscales of the Emotional Intelligence questionnaire are as follows: Emotional Regulation- ($M = 5.58$; $SD = 2.04$), Self-Awareness- ($M = 5.58$; $SD = 1.92$), Self-Motivation- ($M = 5.53$; $SD = 1.96$), Social Awareness- ($M = 5.63$; $SD = 2.02$), Social Skills- ($M = 5.47$; $SD = 2.08$), and Emotional Receptivity ($M = 5.40$; $SD = 2.15$).

The descriptive statistical values of the cognition-oriented scales are as follows: Cognitive Flexibility ($M = 109$; $SD = 14.2$) and Cognitive Resilience are ($M = 3.54$; $SD = 0.479$). In the case of both young and middle-aged adults, cognitive flexibility had the largest spread, owing to the fact that it had a greater number of items than the other scales. All variables showed consistent central tendencies, with means and medians closely aligned, suggesting no substantial skew.

Table 4

The Effect of Mediation in the Sample of Young Adults

Mediator	Effect type	Estimate	<i>SE</i>	<i>Z</i>	<i>p</i>
Self Motivation	Indirect	0.00609	0.00286	2.13	0.033
	Direct	0.0128	0.00429	2.98	0.003
	Total	0.0189	0.0189	0.0189	0.0189
Emotional Regulation	Indirect	0.00665	0.00324	2.05	0.041
	Direct	0.01225	0.00515	2.38	0.017
	Total	0.0189	0.0045	4.2	<.001
Self Awareness	Indirect	0.006	0.00323	1.86	0.063
	Direct	0.0129	0.0052	2.48	0.013
	Total	0.0189	0.00457	4.13	<.001
Social Awareness	Indirect	9.99e-04	0.00168	0.595	0.552
	Direct	0.0179	0.00483	3.709	<.001
	Total	0.0189	0.00457	4.135	<.001
Social Skills	Indirect	0.00333	0.0022	1.51	0.13
	Direct	0.01557	0.00469	3.32	<.001
	Total	0.0189	0.00457	4.13	<.001
Emotional Receptivity	Indirect	0.00323	0.00251	1.29	0.198
	Direct	0.01566	0.00501	3.13	0.002
	Total	0.0189	0.00457	4.13	<.001

The above table shows the role of the six components of Emotional Intelligence as mediators between Cognitive Flexibility (predictor) and Cognitive Resilience (outcome). The mediating effect of Emotional Regulation ($Z = 2.05$, $p < 0.05$) and Self-Motivation ($Z = 2.13$, $p <$

0.05) was found to be significant, thus accepting the hypotheses H_{1a} & H_{1c} specifically with respect to young adults.

Since the data distribution for Emotional Regulation was deviating from the normal, its mediation effect was checked by the bootstrapping method for a sample of 1000 with 95% of confidence interval and the mean ranging from 5.92e-5 to 0.0164.

On the other hand, the mediating effects of Self Awareness ($Z = 1.86, p > 0.05$), Social Awareness ($Z = 0.595, p > 0.05$), Social Skills ($Z = 1.51, p > 0.05$) and Emotional Receptivity ($Z = 1.29, p > 0.05$) were non-significant. Thus, the data rejects the hypotheses H_{1b} , H_{1d} , H_{1e} and H_{1f} specifically with respect to young adults.

Meanwhile, the direct effects remained strongly significant in the case of each of the mediators, indicating the statistically robust influence of the predictor on the outcome in all conditions and that the effect of the significant mediators (emotional regulation and self-motivation) is partial.

Table 5

The Effect of Mediation in the Sample of Middle-aged Adults

As per the above table, although Social Skills had a significant p -value ($Z = -2.12$; $p < 0.05$), the z score itself is negative, showing a suppression effect rather than a mediation effect. Thus, the

Mediator	Effect type	Estimate	<i>SE</i>	<i>Z</i>	<i>p</i>
Self Motivation	Indirect	0.00759	0.00423	1.80	0.073
	Direct	0.01078	0.00587	1.84	0.066
	Total	0.01837	0.00532	3.45	<.001
Emotional Regulation	Indirect	-0.00289	0.00501	-0.576	0.565
	Direct	0.02125	0.00750	2.825	0.005
	Total	0.01837	0.00526	3.473	<.001
Self Awareness	Indirect	-3.52e-5	0.00415	-0.00848	0.993
	Direct	0.0184	0.00612	3.00904	0.003
	Total	0.0184	0.00449	4.08947	<.001
Social Awareness	Indirect	-0.00301	0.00318	-0.946	0.344
	Direct	0.02138	0.00617	3.466	<.001
	Total	0.01837	0.00518	3.543	<.001
Social Skills	Indirect	-0.0077	0.00363	-2.12	0.034
	Direct	0.02607	0.00533	4.89	<.001
	Total	0.01837	0.00449	4.09	<.001
Emotional Receptivity	Indirect	1.29e-04	0.00167	0.0773	0.938
	Direct	0.0182	0.00479	3.8069	<.001
	Total	0.0184	0.00449	4.0895	<.001

data rejects the hypothesis H_{1c} with respect to middle-aged adults.

The mediation effects for the other variables were as follows: Emotional Regulation ($Z = -0.576$, $p > 0.05$), Self Awareness ($Z = -0.000848$, $p > 0.05$), Self-Motivation ($Z = 1.80$, $p > 0.05$),

Social Awareness ($Z = -0.946, p > 0.05$) and Emotional Receptivity ($Z = 0.0773, p > 0.05$). Hence, the data rejects the hypotheses H_{1a} , H_{1b} , H_{1c} , H_{1d} and H_{1f} with respect to middle-aged adults.

The mediators, Emotional Regulation, Social Awareness and Self-Motivation were subjected to bootstrapping since their data was not normally distributed. The bootstrapping considered a sample of 1000, with a confidence interval of 95%. The means for the three variables ranged from -0.0126 to 0.0079, -0.0098 to 0.0033 and $5.92e-5$ to 0.0164, respectively.

Meanwhile, the direct effects remained strongly significant in the case of each of the mediators, indicating the statistically robust influence of the predictor on the outcome in all conditions.

Table 6

Mediating Effect of Total Emotional Intelligence in Both Samples

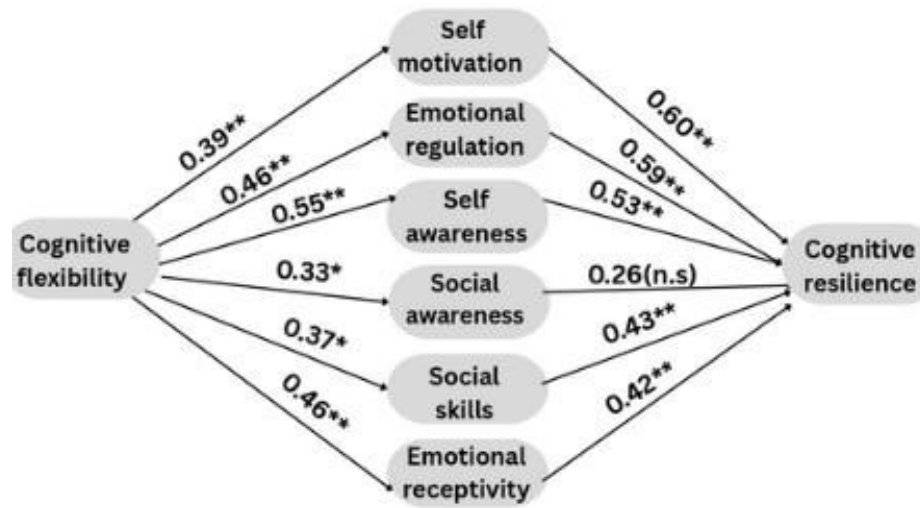
Group	Effect type	Estimate	SE	Z	p
Young adults	Indirect	0.01152	0.00392	2.94	0.003
	Direct	0.00738	0.00504	1.46	0.143
	Total	0.0189	0.00457	4.13	<.001
Middle-aged adults	Indirect	-0.00466	0.00559	-0.833	0.405
	Direct	0.02302	0.00712	3.234	0.001
	Total	0.01837	0.00449	4.089	<.001

The above results were obtained by summing the scores on all the subscales of the Emotional Intelligence questionnaire to get a total emotional intelligence score for each participant.

The results show that emotional intelligence fully mediates the relationship between cognitive flexibility and cognitive resilience in young adults ($Z = 2.94, P < 0.01$). The indirect effect is strongly significant while the direct effect is not significant ($Z = 1.46; p > 0.05$). Hence, the hypothesis H_1 is accepted specifically for young adults. On the contrary, emotional intelligence is not a significant mediator in the case of middle-aged adults ($Z = -0.833, p > 0.05$). Moreover, the direct effect is significant in this case ($Z = 3.234; p < 0.01$). Thus, the data rejects the hypotheses H_1 and H_2 for middle-aged adults.

Figure 1

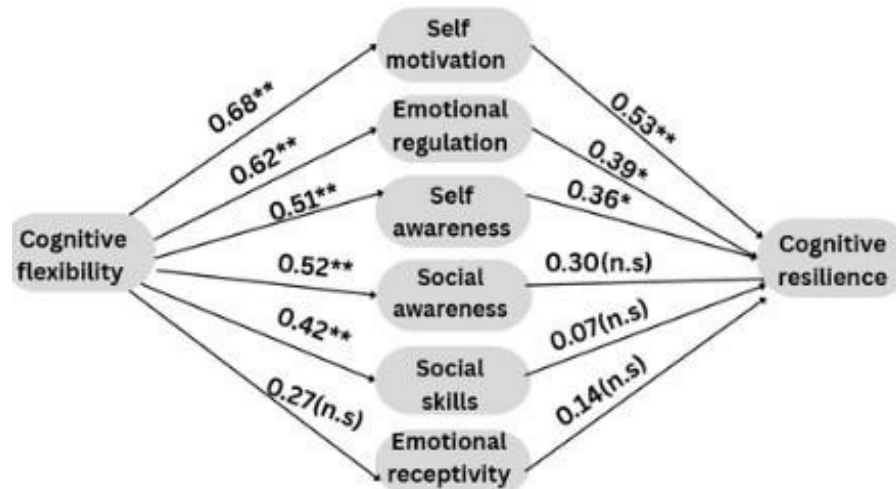
The correlation coefficients of all six components of emotional intelligence in young adults.



Note. **= significant at 0.01 level, *= significant at 0.05 level, n.s = not significant.

Figure 2

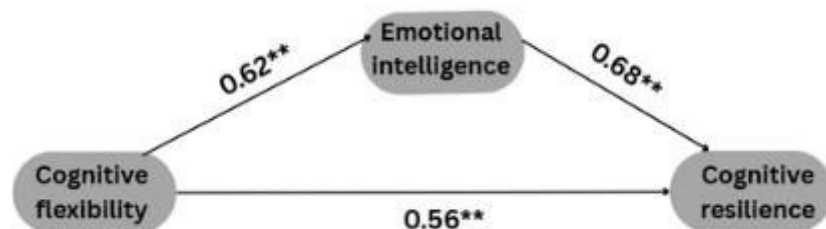
The correlation coefficients of all six components of emotional intelligence in middle-aged adults.



Note. **= significant at 0.01 level, *= significant at 0.05 level, n.s = not significant.

Figure 3

The correlation of total emotional intelligence with cognitive flexibility and cognitive resilience in young adults.



Note. **= significant at 0.01 level.

Figure 4

Correlation of total emotional intelligence with cognitive flexibility and cognitive resilience in middle-aged adults.



Note. **= significant at 0.01 level, *= significant at 0.05 level.

Discussion

The results of this study corroborate with various past studies that dealt with similar affective and cognitive variables. Additionally, this study confirmed the findings of studies done on identical samples in international populations.

We shall first examine the results concerning young adults in the light of past findings, followed by the results of the sample of middle-aged adults. The significant mediating effect of emotional regulation found in young adults is in line with the findings of the cross-sectional study of Nakhostin-Khayyat et al. (2024), who found the same mediating effect of the said variable in the relation between cognitive flexibility and resilience in Iranian university students. KIYE and Habeş (2024) found similar results among Turkish young adults.

Some neuroimaging studies explain the development of emotional regulation in a young adult's brain. Casey et al. (2017) found adolescence to be characterised by changes in the limbic

and cognitive control circuitry, which become more pronounced in young adulthood. The development of medial prefrontal circuitry, in particular, is associated with emotional regulation. Similarly, Liew et al. (2018) discovered that a strengthened connection between the prefrontal cortex and the limbic system in young adulthood makes emotional regulation internalized and autonomous.

The results pertaining to the significant mediating effect of self-motivation in young adults in this study are also in line with past literature. Seidel et al. (2024) studied the relation of self-motivation, emotional intelligence, cognitive appraisal and psychological resilience in Canadian young adults and found that self-motivation leads to psychological resilience. In a unique take on the topic, Pfeifer and Peake (2012) reviewed studies on self-development by amalgamating cognitive, social, affective and neuroimaging approaches. Motivation is multilayered, maintained and influenced by socioemotional factors like dealing with setbacks and cognitive factors like planning and execution, that are sharpened in young adulthood, eventually fostering self-motivation.

On the other hand, other aspects of emotional intelligence, namely self-awareness, social awareness, social skills and emotional receptivity, did not show a significant mediating effect in young adults. Self-awareness is a vital socioemotional skill that encompasses the awareness of one's internal states as well as interactions with others. Enciso et al. (2024) stress the importance of practices like personal reflection, introspection and receiving social feedback for developing a sense of self-awareness. Young adults who do not receive sufficient opportunities for this may have a slower development of self-awareness.

Both social awareness and social skills are dependent on many subjective factors such as family, education and societal norms (Hew et al., 2024). The young adults in the present study belong to diverse cultural and educational backgrounds from across India, which can influence their development of social awareness and skills.

The development of these social aspects of functioning in turn, also has implications for emotional receptivity. Emotional receptivity or the ability to be responsive to one's own and others' emotional states can flourish only when one is sufficiently attuned to their social surroundings. In an intriguing study where adolescents and young adults viewed both positive and negative facial expressions, Bos et al. (2020) noticed that young adults were more inconsistent in

their responses to negative emotions. In other words, they had greater emotional variability, indicating instability and scope for greater evolution in their emotional processing skills.

The results of our study rejected all the hypotheses associated with the sample of middle-aged adults. Past literature hints at factors other than emotional intelligence that might be fostering cognitive resilience in this age group. Thundiparampil (2022) conducted a study with middle-aged adults from India to identify the role played by emotional and spiritual intelligence in coping with midlife. Spiritual intelligence in this context refers to qualities like wisdom, compassion, integrity, peace and joy, which add greater meaning and purpose to life. She found that apart from emotional intelligence, spiritual intelligence also plays an important role at this stage of life, especially its components like critical existential thinking and transcendental awareness.

These findings were echoed by Chapman (2005) who did not find emotional intelligence to be a significant mediator for resilience in middle-aged adults and found spiritual intelligence, social support and life experiences as being protective factors for resilience.

Additionally, one needs to consider the factors that influence the development of emotional intelligence itself. A number of papers have studied the effect of parenting style on the development of emotional intelligence. The parenting styles, first studied by Diana Baumrind (1980) and later expanded by Maccoby and Martin (1983) are: authoritative, authoritarian, permissive and uninvolved. Out of these, the authoritative style is the most ideal, where parents are disciplinarians and at the same time, emotionally available for their children and supportive of them. Meanwhile, the authoritarian style is marked by excessive demandingness and strictness, the permissive style by excessive leniency and the uninvolved style by neglectful parenting. It has been seen that children raised by emotionally responsive parents grow up to be emotionally well-adjusted individuals (Garcia, 2020). Fitri and Rinaldi (2024) found that the authoritative style of parenting had the highest positive contribution (52%) to the development of emotional intelligence in Indonesian adolescents.

Research notes that when the present-day middle-aged adults were still growing up, the authoritarian style of parenting was dominant in India, in contrast to the current times (V. Nidya, 2024). This provides yet another lens to view the significant results of emotional intelligence among the young adults of this study.

Conclusion

In this paper, it was seen that specific aspects of emotional intelligence, namely self-motivation and emotional regulation, acted as mediators between cognitive flexibility and cognitive resilience in young adults. Emotional intelligence as a whole was also a significant mediator in this age group. On the contrary, none of the aspects of emotional intelligence were found to be significant mediators in the case of middle-aged adults. This hints at the need to explore other factors mentioned in the discussion section, as probable factors influencing the development of emotional intelligence and the relation between cognitive flexibility and cognitive resilience.

Unlike several other studies, this research took into account emotional intelligence not just as a unitary variable but as a variable with many vital components. The nuanced role of each of its subcomponents was devoted attention. Moreover, emotional intelligence was explored and compared between two different age groups to give a clearer idea of its developmental aspects.

However, this study is not without its drawbacks. To begin with, the tools used in this research were self-report measures and hence prone to participant biases. Moreover, the sample size for both age groups could have been larger. Both age groups were studied only at one point in time.

Thus, future studies can benefit from administering tasks to participants instead of self-report tests for measuring the variables of this study. This will enhance the precision of measurement. A wealth of information can be generated if a substantially large sample of participants from both age groups is studied longitudinally. Comparisons can be made across genders to gain deeper psychological insights and eventually develop a specialized program for enhancing cognitive resilience for different genders. Finally, research on probable mediating factors other than emotional intelligence listed in the discussion section can make our understanding of the relation between the predictor and outcome variables more robust.

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Conflict of Interest

The authors declare no conflict of interest.

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Author Contributions

Supervision and review K.J.R; writing, editing, original draft preparation, formal analysis and software, S.Y.K. Both authors have read and agreed to the published version of the manuscript.

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