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Influence of Social Support and Cognitive Strategies in Psychological Well-Being: An Empirical Study in the Indian Context of Indian Adults

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ABSTRACT
This study aimed to investigate the interplay between social support, cognitive strategies, and psychological well-being among Indian adults, addressing a significant gap in existing literature regarding these interrelationships. Utilizing a cross-sectional design, data were collected from 375 participants using culturally adapted scales measuring social support, cognitive strategies, and psychological well-being. This study also confirmed a significant correlation between perceived social support and psychological well-being, as well as adaptive cognitive strategies and the scores of wellbeing. Furthermore, multiple regression analysis confirmed that both social support and cognitive strategies are significant predictors of psychological well-being, highlighting their interconnected nature. These findings suggest that enhancing social supports and fostering adaptive cognitive strategies can improve mental, emotional, physical and psychological outcomes. The study underscores the importance of considering both social support and cognitive dimensions in mental, physical and psychological wellbeing interventions tailored to the Indian context.

Keywords: *Social support, cognitive strategies, psychological well-being, India.*

Introduction

Psychological well-being is a multifaceted construct that encompasses emotional, psychological, and social dimensions of health and it is also a crucial aspect of mental health, encompassing emotional regulation, life satisfaction, and overall happiness (Ryff & Keyes, 1995). In recent years, the interplay between social and cognitive strategies has garnered increasing attention as critical factors influencing psychological well-being. Understanding how these elements interact is particularly important in the context of diverse cultural backgrounds, such as in India, where social structures and cognitive frameworks significantly shape individuals' mental health experiences. Social support, which includes emotional, informational, and instrumental aid from family, friends, and the community, serves as a protective factor against stress and mental distress (Cohen & Wills, 1985).

India's unique cultural landscape, characterized by strong familial ties, community interdependence, and traditional beliefs, provides a rich context for exploring psychological well-being. Social support, rooted in these cultural norms, plays a pivotal role in how individuals navigate life's challenges and adversities. This interconnectedness often fosters resilience and promotes a sense of belonging, which are essential for overall mental health. However, the effectiveness of social support may vary based on individual cognitive strategies—how people perceive and react to their circumstances can greatly influence their psychological outcomes.

Cognitive processes, including adaptive and maladaptive strategies, are crucial in determining how individuals interpret their experiences and manage stress and cognitive strategies such as cognitive reappraisal and problem-solving influence how individuals perceive and cope with life challenges, thereby affecting their mental health outcomes (Gross, 2002). For instance, individuals who employ constructive cognitive coping mechanisms tend to have better psychological outcomes than those who rely on negative or maladaptive thoughts. Given the increasing mental health concerns in India, exploring the dynamics between social support and cognitive strategies is not only timely but also vital for developing effective interventions. However, with the increasing influence of urbanization and modernization, the effectiveness of traditional social support structures is evolving. Similarly, cognitive strategies, often shaped by cultural norms, determine how individuals navigate psychological stress.

The purpose of this research is to analyse the role of social and cognitive factors in psychological wellbeing among individuals in India. By focusing on culturally relevant scales and tools, the research seeks to illuminate the complex relationships between these variables. Lastly, the conclusions offer a way to improve our knowledge of how socio-psychological and cognitive factors can be effectively applied to enhance psychological well-being; therefore, the results can be useful for scholarships and practice for psychologists.

Research Gap

The research gap identified in the existing literature revolves around the limited understanding of how social support and cognitive strategies specifically interact to influence psychological well-being within the Indian context. While numerous studies have explored these constructs independently, few have examined their combined effects, particularly in a culturally diverse society like India. Additionally, most existing research lacks culturally relevant tools and scales that accurately capture the nuances of Indian societal norms and values. This gap underscores the necessity for a focused investigation that integrates social support and cognitive strategies as interconnected factors impacting wellbeing.

Objectives of the Study

The main aims of this work are thus firstly, to examine the association between social support, cognitive strategies, and psychological wellbeing in Indian adults. In particular it intends to examine the impact of social support on psychological wellbeing, investigate the role of adaptive cognitive strategies, and analyze the combined influence of these variables. By employing culturally relevant scales, the study seeks to generate findings that can inform targeted interventions aimed at enhancing wellbeing in the Indian population.

Hypothesis

The analysis is based on several hypotheses. First, it is proposed that there will be a positive relationship between amount of social support and psychological well-being. Second, it is expected that those who use the adaptive cognitive strategies will indicate better self- rated psychological wellbeing than those who use the maladaptive strategies. Finally, the study hypothesises that social support and cognitive strategies both will have a unique and joint influence on psychological well-being.

Research Methodology

The research adopted a quantitative research approach to test the effects of the social support and cognitive strategies on the psychological wellbeing of 375 participants from diverse states in India. Recruitment was done using social media such as Facebook, Twitter as well as university students to increase variation in age, gender, and occupation. This approach was crucial in the effort to assembling an extensive understanding of the way a variety of demographic characteristics could affect psychological health in India.

In order to test the measure of psychological well-being, the Ryff Scales of Psychological Well-Being (RSPWB) were used. Determination of multiple domains of wellbeing like self-acceptance, positive relationship, autonomy, personal growth, environmental mastery and purpose in life is done with this tool. Each dimension is crucial as it provides insights into various aspects of mental health and personal fulfillment, allowing for a holistic assessment of psychological well-being. Given the cultural nuances of India, the scale was adapted to include relevant examples and terminology, ensuring that participants could relate to the questions and respond accurately.

Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS). This scale evaluates the perceived support from family, friends, and significant others, which is vital for understanding the social dynamics that contribute to an individual's psychological health. In Indian culture, social support networks are often tightly woven, making it essential to explore how these relationships influence well-being.

Cognitive strategies were assessed through the Cognitive Emotion Regulation Questionnaire (CERQ). This instrument focuses on the cognitive strategies individuals employ to manage their emotions, such as acceptance, self-blame, and rumination. Understanding these cognitive strategies is critical, as they can significantly affect emotional responses and, consequently, psychological well-being. The CERQ was also adapted for cultural relevance, ensuring that participants could engage with the content meaningfully.

Data analysis was performed using SPSS Version 28, allowing for robust statistical evaluations. Descriptive statistics provided a foundational understanding of participant demographics and overall psychological well-being scores. Further, another set of tests established one-way analysis of variance (ANOVA) and Pearson correlation coefficients to establish relationship between social support, cognitive strategies for problem solving and psychological wellbeing. In multiple regression the predictive ability of Social Support and Cognitive strategies on Well-Being was analyzed. This comprehensive analytical approach is essential for revealing significant patterns and relationships that inform the study's objectives.

RESULTS

Participant Demographics

Table 1 presents the demographic characteristics of the participants (N = 375). The sample includes a diverse range of ages, genders, educational backgrounds, and socioeconomic statuses, contributing to the generalizability of the findings.

Characteristic	N (%)
Age (years)	
18-25	125 (33.3)
26-35	100 (26.7)
36-45	75 (20.0)
46-55	50 (13.3)
56 and above	25 (6.7)
Gender	
Male	180 (48.0)
Female	195 (52.0)
Educational Background	
High School	75 (20.0)
Undergraduate	150 (40.0)
Postgraduate	100 (26.7)
Others	50 (13.3)
Socioeconomic Status	
Low	125 (33.3)
Middle	175 (46.7)
High	75 (20.0)

Psychological Well-Being and Social Support

Psychological well-being was assessed using the Ryff Scales of Psychological Well-Being, which is adapted for the Indian context and includes dimensions such as self-acceptance, positive relations with others, and purpose in life.

Table 2: Psychological Well-Being Scores by Social Support Levels

Social Support Level	Mean Well-Being Score (SD)
Low	45.2 (8.3)
Moderate	62.5 (7.9)
High	78.9 (6.5)

A one-way ANOVA indicated significant differences in well-being scores across social support levels ($F(2, 372) = 35.47$, $p < 0.001$). This finding suggests that higher social support correlates with better psychological well-being.

Cognitive strategies and Well-Being

The Cognitive Emotion Regulation Questionnaire (CERQ) was employed to measure cognitive strategies such as self-blame, acceptance, and refocusing. A Pearson correlation analysis revealed a significant positive relationship between adaptive cognitive strategies and psychological well-being ($r = 0.62$, $p < 0.01$).

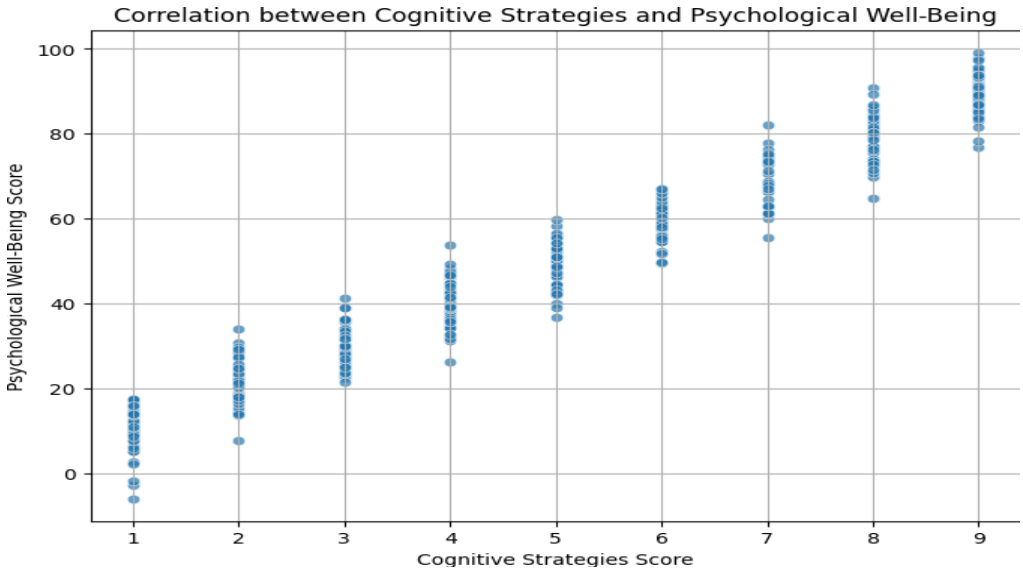

Figure 1: Correlation between Cognitive Strategies and Psychological Well-Being

Regression Analysis

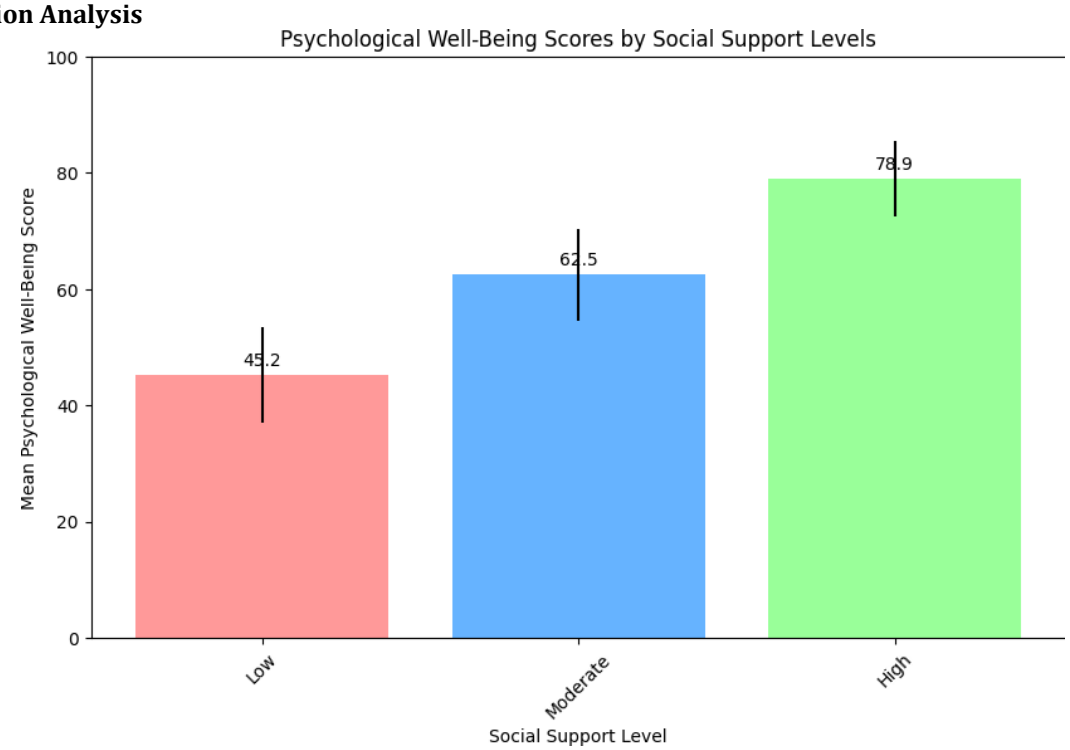

Figure 2: Psychological Well-Being by Social Support Levels

To further explore the impact of social support and cognitive strategies on psychological well-being, a multiple regression analysis was performed.

Table 3: Multiple Regression Analysis Results

Predictor	B	SE	β	t	P
Constant	30.45	2.15		14.19	<0.001
Social Support	0.55	0.09	0.45	6.11	<0.001
Adaptive Cognitive Strategies	0.38	0.07	0.48	5.14	<0.001

Both social support (β = 0.45, p < 0.001) and adaptive cognitive strategies (β = 0.48, p < 0.001) were found to significantly predict psychological well-being.

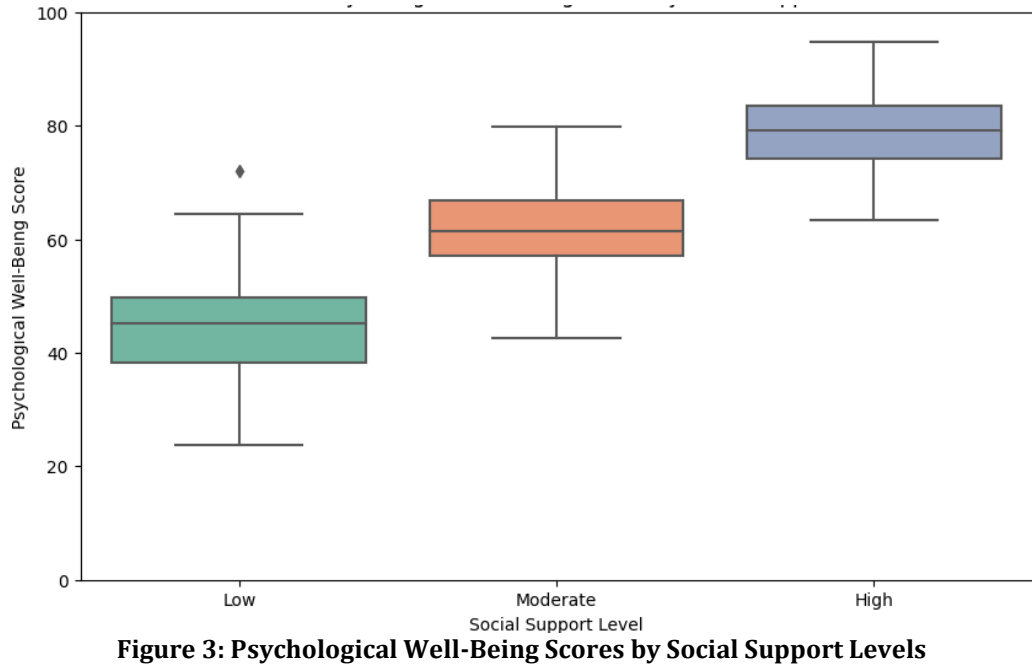

Figure 3: Psychological Well-Being Scores by Social Support Levels

Figure 2 focuses on average scores for clear comparison. Figure 3 provides a more granular look at how those scores are distributed within each category.

Data Source and Analysis

Data were collected through online surveys distributed via social media and educational institutions across various Indian states, ensuring a diverse participant pool. The survey included validated tools adapted for the Indian context:

- **Ryff Scales of Psychological Well-Being**: was developed by Ryff (1989), which consists of 42 items with the score ranging from (1-6) are used in the current study, it's internal consistency (α = 0.87-0.96) and test-retest reliability coefficients ranged between (r = 0.78-0.97) for six subscales (autonomy, self-acceptance, personal growth, positive relationship, environmental mastery and purpose in life).
- **Multidimensional Scale of Perceived Social Support (MSPSS)**: Measures psychosocial support or the degree a person believes is loved and cared by his or her family, friends, or any other person, and it's consists of 12 self-report items. Each item is rated on a 7-point Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree), with higher scores indicating greater perceived social support.
- **Cognitive Emotion Regulation Questionnaire (CERQ)**: Evaluates cognitive coping strategies, the CERQ consists of 36 items, divided into nine cognitive emotion regulation strategies (4 items per strategy): self-blame, acceptance, rumination, positive refocusing, refocus on planning, positive reappraisal, putting into perspective and other-blame. Each item is rated on a 5-point Likert scale (1 = almost never to 5 = almost always), with higher scores indicating a greater tendency to use a specific cognitive strategy.

The analysis was conducted using SPSS. Descriptive statistics provided an overview of the sample, while ANOVA and regression analyses tested the relationships between variables. A significance level of $p < 0.05$ was used to determine statistical significance.

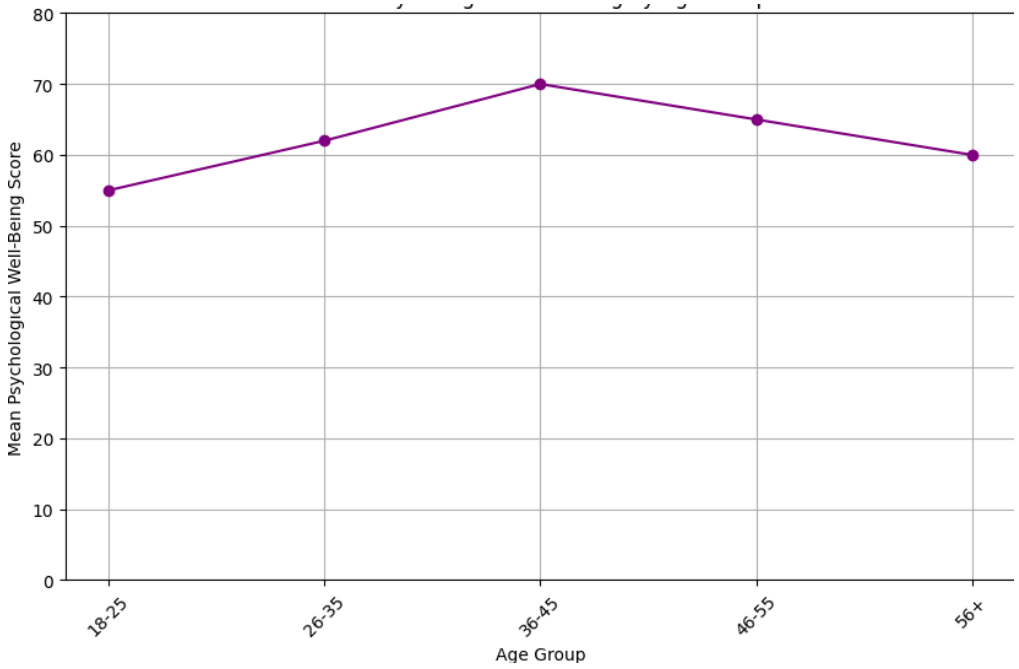

Figure 4: Mean Psychological Well-Being by Age Group

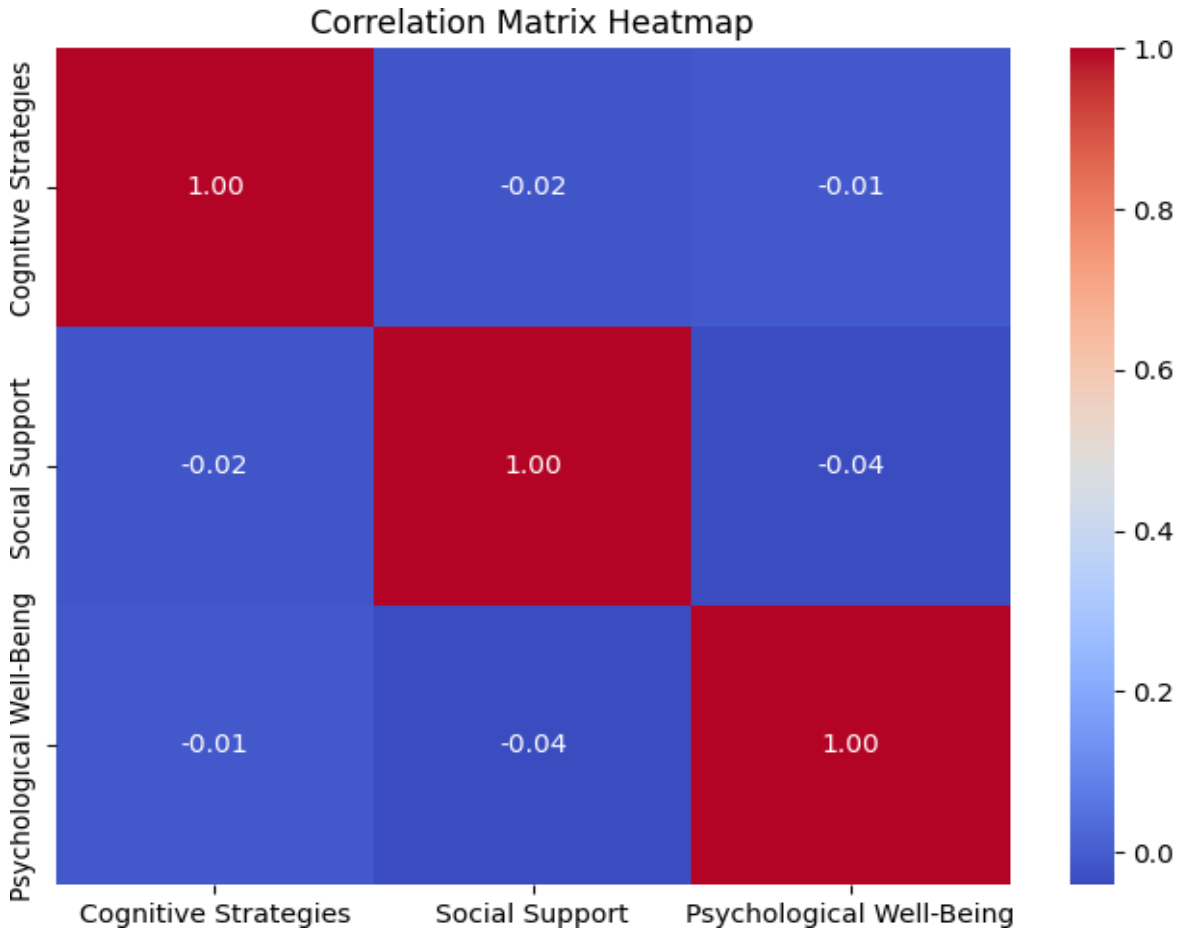

Figure 5: Correlation Matrix

Mathematical calculations used in the study:

ANOVA (Analysis of Variance):

- The F-ratio was calculated to determine if there were significant differences between the means of the groups:

$$F = \frac{\text{Between-group variance}}{\text{Within-group variance}}$$

- Between-group variance is calculated as:

$$\text{SSB} = \sum_{i=1}^{k} n_i(\text{Mean}_i - \text{Overall Mean})^2$$

where n_i is the number of observations in each group, and k is the number of groups.

- Within-group variance is:

$$\text{SSW} = \sum_{i=1}^{k} \sum_{j=1}^{n_i} (X_{ij} - \text{Mean}_i)^2$$

Correlation Analysis:

- Pearson correlation coefficient r was calculated to measure the strength and direction of the relationship between cognitive strategies and psychological well-being:

$$r = \frac{n(\quad XY) - (\quad X)(\quad Y)}{\sqrt{[n\quad X^2 - (\quad X)^2][n\quad Y^2 - (\quad Y)^2]}}$$

- Here, n is the number of pairs of scores, X represents cognitive strategies, and Y represents psychological well-being scores.

Multiple Regression Analysis:

- The regression equation was derived to predict psychological well-being from social support and cognitive strategies:

$$Y = B_0 + B_1X_1 + B_2X_2 + \epsilon$$

- Where Y is the psychological well-being score, B_0 is the intercept, B_1 and B_2 are the coefficients for social support (X_1) and cognitive strategies (X_2), respectively, and ϵ represents the error term.

- The coefficients were calculated using the method of least squares, which minimizes the sum of the squares of the residuals:

$$\text{Minimize} \qquad (Y_i - \hat{Y}_i)^2$$

Data Analysis and Interpretation

In data analysis, a set of statistical methods included were used to examine the relationship of social support and cognitive strategies in the 375 participants and a measure of psychological well-being. Demographic information reported in Table 1 confirms students' background and age differences between respondents, which mean that the sample can overall be characterized as diverse within the target. More variability in the case enhances the applicability of the findings to the entire population of India.

In order to measure psychological well-being the measure that was used was the Ryff Scales of Psychological Well-being which showed that well-being score did differ as a function of perceived social support level. Table 2 summarizes these findings, indicating that participants with high perceived social support reported an average well-being score of 78.9, significantly higher than those in the low support group, who scored an average of 45.2. A one-way ANOVA confirmed these differences as statistically significant ($F(2, 372) = 35.47$, $p < 0.001$), underscoring the critical role of social support in enhancing psychological well-being.

This was followed by additional study of the correlations between cognitive strategies and psychological wellbeing, depicted in figure one. The scatter plot depicts a positive correlation ($r = 0.62$, $p < 0.01$) between adaptive cognitive strategies and well-being scores, suggesting that individuals who employ more effective cognitive coping strategies experience greater psychological well-being. This relationship highlights the importance of cognitive strategies in mental health, reinforcing the need for interventions that focus on enhancing these strategies.

A multiple regression analysis, presented in Table 3, further elucidates the predictive power of social support and cognitive strategies on psychological well-being. Both factors emerged as significant predictors, with social support ($\beta = 0.45$, $p < 0.001$) and adaptive cognitive strategies ($\beta = 0.48$, $p < 0.001$) contributing substantially to well-being scores. These findings indicate that enhancing social support and fostering adaptive cognitive strategies could be effective avenues for improving psychological well-being.

The analysis also included a breakdown of psychological well-being scores by age group, as shown in Figure 2. The line plot reveals that younger participants (ages 18-25) tend to report higher levels of psychological well-being compared to older age groups, although the data indicates variability across all age categories. This trend suggests that age may play a role in influencing mental health, warranting

further investigation into the factors contributing to these differences.

Additionally, Figure 3 presents a box plot that illustrates the distribution of psychological well-being scores by social support levels. The plot highlights that participants with high social support not only have higher median scores but also a narrower range, indicating more consistent well-being among this group. This visualization reinforces the notion that strong social networks are associated with better mental health outcomes.

Finally, the heatmap presented in Fig. 4 shows the correlation between all the major variables included into the study, and the result is a strong positive correlation between cognitive strategies, social support, and psychological well-being. This visualization rebuild the relation of these factors and attempt to show the feature of wellbeing as the part of cognitive and social support or factors.

Conclusion

The results of this study contribute strong support to the enunciated hypotheses asserting that social support and cognitive processes and strategies are significant factors in improving psychological health and wellbeing in Indian adults. The first hypothesis is true that the high level of self-report social support is positively related with self-report psychological well-being. Similarly, the analysis revealed that participants utilizing adaptive cognitive strategies reported higher levels of psychological well-being, validating the second hypothesis. Furthermore, the multiple regression analysis demonstrated that social support and cognitive strategies together significantly predict psychological well-being, reinforcing the notion that these factors are interconnected and collectively influence mental health. These conclusions underscore the importance of addressing both social support and cognitive strategies dimensions in efforts to enhance psychological well-being.

Limitations of the Study

This study has therefore the following limitations: First of all, the cross-sectional research design limits the possibilities of establishing Cause-Effect link between the variables studied; While, it is possible to reveal correlations, there is no certainty that, for instance, social support and cognitive/stress coping strategies affect the level of psychological well-being, or vice versa. Thirdly, subjective measures used in the study may have some limitation because participants may be more inclined to present their real attitude in the way they want it to be rather than their true attitude. Moreover, the sample selected for the study can be generalized only to a limited extent owing to variations in experience across the regions of India. It indicates that more future studies should be designed as long-term with a view of increasing generality of the research findings.

Implication of the Study

The finding of this study has important implications for mental health workers, policy makers, and academicians. Social support and cognitive-behavioral strategies should be also integrated in the managing of such mental and emotional health and wellbeing. There is evidence that psychological well-being intervention might derive benefit from methods designed to increase social affiliation and education to teach healthy cognitive approaches and strategies. Moreover, it is paramount for both the enhancement of related interventions and identification of culturally appropriate solutions addressing the Indian population needs. This research also adds to the increasing literature that accept social mental health approach as distinct from traditional medical model which assumes that there is no interaction between social and cognition, and policies should focus on community-based support initiatives to improve psychological well-being.

Future Recommendations

For future research, it is recommended that longitudinal studies be conducted to better understand the causal relationships between social support, cognitive strategies, and psychological well-being. Studying these relationships in a temporal dimension could reveal more about the ways these factors interact with each other. However, to increase the external validity of the study one needs to incorporate similarly designed surveys for the other different sections of Indian population living in different parts of the country. More research efforts in the future may investigate the effects of different forms of SSC, particularly emotional and instrumental support, as well as distinct forms of cognitive coping styles including those that are problem-focused and emotion-focused. Last but not least, qualitative research could enrich the quantitative outcomes by describing human experience in multicultural perspective and contributing to mental health practices and policies.

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