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Assistant Professor in Psychology,  
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Phone: +919765606178,  
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Maharashtra, India  
Cell: +91 9765606178.  
E-mail: [phonixjournals@gmail.com](mailto:phonixjournals@gmail.com)

**CONTACT INFORMATION**

Phonix International Journal for Psychology and Social

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Email:- [editorpijpss@gmail.com](mailto:editorpijpss@gmail.com)

Cell: [+91 9423676178](tel:+919423676178) | [+91 9422676178](tel:+919422676178) / [+91 9765606178](tel:+919765606178)

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**PIJPSS-PSY-07-04-001**

## **Innovative Color-Coding Approach for Holistic Development in Pre- Primary Students**

**Gayathiri Devi. R.K,**

Guest Bala Sevika

Government Primary School

Kottucherry pet, Pondicherry

### **ABSTRACT**

This report examines the effectiveness of the Innovative Color-Coding Approach in fostering holistic development in pre-primary students. By utilizing color-coded games, students engage in activities that enhance cognitive, physical, socio-emotional, fine motor, and language skills. Through hands-on games such as the Color Sorting Game, Color Ball Game, and Emotional Color Ball Game, children develop problem-solving, motor coordination, empathy, and language abilities. The approach successfully integrates interactive, play-based strategies to provide a fun and engaging learning environment, supporting overall growth and academic readiness. The results highlight its potential as a valuable teaching tool in early childhood education.

**Keywords-** Color-Coding Approach, pre-primary students.

### **INTRODUCTION**

In my teaching journey, I have come to recognize that the early years are crucial for shaping a child's future academic success and overall growth. Believing strongly in play-based and hands-on learning, I developed an innovative Color-Coding Approach that integrates cognitive, physical, socio-emotional, fine motor, and language skills into engaging classroom activities. This article outlines how I implemented this approach, the process behind each activity, and the overall positive impacts observed in my pre-primary students.



**Enhancing the Cognitive Domain: The Color Sorting Game** I designed the “Color Sorting Game” to boost mental processes like problem-solving, attention, and memory.

- **Context's Need:** I noticed that my young learners needed a fun way to improve their color recognition and cognitive skills.
- **Plan's Process:** In small groups of 4-5, I introduced the game by explaining its objective and demonstrating how to sort colored beads into matching-colored squares. After a brief practice session, the children played the game for 15-20 minutes while I provided continuous feedback.
- **Outcome:** The game significantly improved the students' problem-solving abilities, hand-eye coordination, and color recognition.
- **Advancing Language Development: The Color Vocabulary Game**  
Language skills are vital for effective communication, so I incorporated the “Color Vocabulary Game” into my curriculum.



- **Context's Need:** To strengthen language skills and the association between words and objects, I designed an activity that involved matching color vocabulary cards with corresponding objects.
- **Plan's Process:** I introduced the game in small groups by explaining the rules and demonstrating the matching process. The students then played the game while I provided constructive feedback to enhance their learning.

- **Outcome:** This game proved effective in developing their language skills, particularly in vocabulary building and object association.

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## 2. Developing Fine Motor Skills: Color Ball Placement Game

For fine motor development, I initiated the “**Color Ball Placement Game**”, focusing on development of small muscle groups, including hands, fingers, and wrists. It involves the ability to perform precise movements, such as grasping, manipulating, and coordinating objects.



- **Context's Need:** Children need to develop fine motor skills to perform daily tasks and maintain independence. Develop hand-eye coordination, fine motor skills, and overall dexterity.
- **Plan's Process:** Provide small colored balls and a designated area. Demonstrate the game, ask the child to place the balls, and encourage fine motor practice.

- **Outcome:** The activity successfully enhanced their fine motor development by promoting hand-eye coordination, fine motor skills, and overall dexterity.

## 3. Nurturing the Socio-Emotional Domain: The Emotional Color Ball Game

Emotional intelligence and empathy are key to building positive relationships, so I created the “**Emotional Color Ball Game**”.

- **Context's Need:** I observed that my students needed opportunities to express their feelings and build emotional awareness.
- **Plan's Process:** In small groups, each child picked a colored ball, unwrapped it, and expressed the emotion associated with that color. I introduced the activity, demonstrated it, and then allowed the children to explore the game while I provided supportive feedback.
- **Outcome:** This activity enhanced their emotional awareness, empathy, and self-expression, contributing to healthier socio-emotional development.



#### 4. Building the Physical Domain: The Color Ball Toss Game

To foster gross motor skills and coordination, I introduced the “Color Ball Game”.

- **Context & Need:** Recognizing the need for physical activity to enhance overall well-being, I developed an activity where students picked up colored balls and ran to the matching-colored square before tossing the ball into it.
- **Plan & Process:** I explained and demonstrated the game to a large group of students. They then participated enthusiastically, and I offered feedback on their performance throughout the session.
- **Outcome:** This game not only improved the children’s gross motor skills and hand-eye coordination but also reinforced their ability to recognize colors.



#### OVERALL IMPACTS

Through the Innovative Color-Coding Approach, I witnessed remarkable progress across all developmental domains. My students demonstrated enhanced cognitive abilities, improved physical coordination, greater socio-emotional awareness, refined fine motor skills, and stronger language proficiency. The activities not only made learning enjoyable but also provided a solid foundation for their future academic and personal growth. I believe that this approach, with its

clear structure and engaging methods, can be a valuable resource for educators seeking to promote holistic development in pre-primary classrooms.

## CONCLUSION

In reflecting on my experience with the Innovative Color-Coding Approach, I can confidently say that it has been a transformative strategy for promoting holistic development in my pre-primary students. By integrating play-based, interactive activities into our daily lessons, I observed significant improvements across all developmental domains from enhanced cognitive and language skills to better physical coordination, fine motor abilities, and socio-emotional growth. This approach not only made learning enjoyable and engaging but also provided my students with a strong foundation for future academic and personal success. I am inspired to continue refining and expanding these methods, believing wholeheartedly that innovative teaching strategies like this can truly empower young learners to reach their full potential.

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**PIJPSS-PSY-07-04-002**

## **Assessing the Impact of Mobile Usage on Students' Health: A Study of Physical and Mental Well-Being**

**Akshay Bapu Jadhav**

### **ABSTRACT**

The present study explores the effects of mobile phone usage duration on the physical and mental health of students aged 16–20 years. Using a self-designed survey administered to 90 students divided into three groups based on daily mobile phone usage (2–5 hours, 5–8 hours, and more than 8 hours), the research investigates physical health problems (eye strain, poor posture, disturbed sleep) and mental health challenges (anxiety, stress, addiction). Findings indicate a positive correlation between prolonged usage and increased health issues, highlighting that students using mobile phones for more than 8 hours daily experience the most severe impacts. The study emphasizes the need for targeted awareness campaigns and interventions to promote balanced usage and protect students' well-being.

**Keywords:** mobile phone usage, physical health, mental health, students, screen time

### **INTRODUCTION**

Mobile phones have become indispensable tools in modern education and daily life. Students rely on them for academic resources, communication, and entertainment (Twenge et al., 2019). However, excessive screen time has been linked to adverse effects on both physical and mental health (Bener et al., 2019; Demirci et al., 2015). Particularly concerning are the growing rates of anxiety, stress, and digital addiction among young people, alongside physical health issues like eye strain, sleep disturbances, and musculoskeletal problems (Harvard Health Publishing, 2020; Kuss & Griffiths, 2017).

In Maharashtra, India, concerns about the negative impact of mobile phone overuse are rising due to trends such as increasing exposure to inappropriate content, declining mental health, and lifestyle-related physical complaints among students. Against this backdrop, the current study aims to examine the relationship between mobile phone usage duration and students'

physical and mental well-being, with the goal of informing practical strategies for healthier technology habits.

## **LITERATURE REVIEW**

Several studies have documented the physical consequences of prolonged mobile phone use. For example, Bener et al. (2019) found that excessive users are more likely to experience musculoskeletal discomfort, headaches, and poor posture. Harvard Health Publishing (2020) explained how blue light emitted from screens interferes with melatonin production, disrupting sleep quality.

The psychological impacts are similarly concerning. Kuss and Griffiths (2017) highlighted how social media can foster addiction-like symptoms, leading to irritability and distress when not in use. Twenge et al. (2019) noted increased anxiety and depressive symptoms among adolescents with higher digital media consumption. Demirci et al. (2015) found a link between smartphone use severity and poor sleep, anxiety, and depression among university students.

Positive aspects of mobile phone use, such as improved connectivity and access to information, are acknowledged in the literature (Vannucci et al., 2017). However, scholars emphasize that these benefits do not outweigh the risks when daily usage exceeds healthy limits (Elhai et al., 2016; Thomée et al., 2011).

## **STATEMENT OF THE PROBLEM**

While mobile phones are integral to student life, unregulated and prolonged usage can negatively impact both physical and mental health. There is a critical need to empirically examine these effects within the context of students aged 16–20 years in Maharashtra. The study seeks to fill this gap by analyzing the relationship between daily usage duration and health outcomes, ultimately aiming to guide awareness initiatives and healthier usage practices.

## **OBJECTIVE OF THE STUDY**

1. To examine the relationship between the duration of mobile phone usage and physical health issues among students aged 16–20 years.

2. To investigate the relationship between the duration of mobile phone usage and mental health issues among students aged 16–20 years.
3. To compare the severity of physical and mental health issues among students based on different durations of daily mobile phone usage, particularly identifying whether students using phones for more than 8 hours daily experience worse outcomes.

### HYPOTHESES OF THE STUDY

- **H1:** There is a significant relationship between the amount of time spent using mobile phones and physical health issues among students aged 16–20 years.
- **H2:** There is a significant relationship between the amount of time spent using mobile phones and mental health issues among students aged 16–20 years.
- **H3:** Students who use mobile phones for more than 8 hours daily will experience more severe physical and mental health issues compared to those with shorter usage durations.

### METHODOLOGY

#### PARTICIPANTS

A total of 90 students aged 16–20 years participated in the study. They were divided equally into three groups based on self-reported daily mobile phone usage:

- **Group 1:** 2–5 hours/day (n = 30)
- **Group 2:** 5–8 hours/day (n = 30)
- **Group 3:** More than 8 hours/day (n = 30)

#### RESEARCH DESIGN

A descriptive, correlational design was used to explore associations between mobile phone usage duration and health issues.

#### DATA COLLECTION

A self-designed survey collected data across two domains:

- **Physical Health:** Eye strain, sleep quality, posture-related discomfort, and general physical activity levels.
- **Mental Health:** Anxiety, stress, irritability, and self-reported addiction tendencies.

The survey included both multiple-choice questions and Likert-scale items (1=Never to 5=Always).

## PROCEDURE

Data were gathered via online questionnaires and brief interviews conducted in educational institutions in Maharashtra. Consent was obtained from participants, and confidentiality was ensured. Descriptive statistics and percentage analysis were used to interpret the data.

## RESULTS

**Table 1 presents the findings on physical and mental health impacts across groups.**

| Daily Mobile Usage | Physical Health Impact (%) | Mental Health Impact (%) |
|--------------------|----------------------------|--------------------------|
| 2–5 hours          | 50.42                      | 36.67                    |
| 5–8 hours          | 68.13                      | 61.25                    |
| >8 hours           | 85.21                      | 80.63                    |

The results indicate a clear pattern: as daily mobile usage increases, the percentage of reported physical and mental health issues rises correspondingly. Students using phones more than 8 hours daily reported the highest rates of eye strain, poor posture, sleep disturbances, anxiety, and symptoms of addiction.

## DISCUSSION

The findings support all three hypotheses. There is a positive relationship between mobile phone usage duration and the severity of physical and mental health issues among students. Consistent with previous research (Bener et al., 2019; Harvard Health Publishing, 2020), students with prolonged usage reported higher incidences of eye strain, musculoskeletal discomfort, and sleep disturbances. The mental health findings align with Twenge et al.

(2019) and Demirci et al. (2015), highlighting anxiety, stress, and addictive behaviors. Notably, students in the >8 hours group reported impacts nearly double those in the 2–5 hours group, underscoring the compounding risks of excessive use. These results suggest that digital device usage exceeding moderate daily limits is detrimental to well-being, with effects spanning physiological and psychological domains.

## CONCLUSION

The study confirms that prolonged mobile phone use among students aged 16–20 is associated with significant physical and mental health challenges. Students using phones for more than 8 hours daily are at greatest risk, experiencing heightened anxiety, stress, addiction tendencies, and physical problems like eye strain and sleep disruption.

Promoting balanced usage and digital well-being is critical to safeguarding the health of students. Practical steps include education, monitoring tools, and encouraging healthier alternatives to screen time.

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## Impact of Resilience on Coping and Psychological Well-being among Adolescents.

**Dr Shilpa S.**

Assistant Professor

Department of Psychology  
BMS College for Women  
Bengaluru, Karnataka

**Ms Vidhya Singh L.**

Assistant Professor,

Department of Psychology,  
BMS College for Women,  
Bengaluru, Karnataka

**Mrs. Rachana K.M.**

Assistant Professor

Department of Commerce  
BMS College for Women, Bengaluru, Karnataka

### ABSTRACT

Resilience development during adolescence is crucial as it prepares them to face challenges, maintain better mental health, enhance psychological well-being and foster coping skills. Improving such skills during this stage can help them grow as better individual and foster a strong foundation for growing into capable and strong adults. The present study aims to explore the impact of Resilience on coping mechanisms and psychological well-being among adolescents (N=80) aged between 14 to 18 years from Bengaluru city. The adolescents were administered the Information Schedule prepared by the researcher, Psychological Well-Being Scale developed by Carol Ryff, Brief COPE Inventory developed by Carver et.al, Resilience Scale developed by Gail M. Wagnild and Heather M. Young. Directional hypotheses were formulated and the obtained results were statistically analysed using the Pearson correlation coefficient (r). The results indicated that adolescents with higher resilience demonstrated problem-focused coping strategies, while adolescents with low resilience showed avoidant coping strategies. Psychological well-being was also strongly related to resilience, thus adolescents with high psychological well-being showed higher resilience. Thus, the present study paved the way for the need to improve resilience during adolescence.

**Keywords:** Resilience, Coping & Psychological Well-being.

## INTRODUCTION

As we all know, adolescence is a transitional stage from childhood to early adulthood. This stage is often characterized by changes in different aspects of life, which include physical, emotional, and social changes. It is during this period that they are more vulnerable to stress due to academic pressures, peer influences, and shifting family expectations. However, there are individual variations observed in terms of adolescents dealing with such life stressors. Some can adapt positively and maintain good psychological health despite adversity—this capacity is referred to as resilience.

Resilience is often referred to as one's ability to tolerate adversity and bounce back from challenges. Resilience plays a vital role in adolescents' ability to handle stressful situations. Many research evidence indicates that adolescents with higher levels of resilience adopt more constructive strategies, such as problem solving, seeking support, or positive reframing, while adolescents with lower levels of resilience may rely on avoidance or withdrawal strategies to cope with stress, which in turn leads to low psychological well-being. Being resilient would help the adolescent in building confidence, higher self-esteem, better mental health, lower risks of anxiety and depression, and a higher level of satisfaction. In recent years, resilience has gained more attention from educators, psychologists, and medical experts as a protective and promoting component in the development of adolescents. It is currently believed that building resilience can promote growth, optimism, and healthy adjustment in addition to mitigating the detrimental effects of stressors. Designing interventions to help adolescents navigate the difficulties of this transitional life stage requires an understanding of how resilience affects coping and psychological well-being.

## LITERATURE REVIEW

**Compas and colleagues (2001)** analysed coping processes among children and adolescents. It was found from this study that resilient adolescents are more likely to use engagement coping, which mediates the link between stress and psychological well-being. Further examination indicated that adolescents' dependence on avoidance strategies indicated depressive symptoms and poorer adjustment. This review underscores that coping serves as

the mechanism through which resilience influences well-being. Their developmental perspective highlights adolescence as a critical stage for teaching adaptive coping skills.

**Fergus and Zimmerman (2005)** investigated resilience among adolescents with contextual risks such as poverty, discrimination, and family stress. This study revealed that Resilient adolescents often demonstrate proactive coping skills, seek social support, and reframe adversity positively. It was also understood from this study that resilience processes are socially embedded — peer and family relationships enhance coping and mental well-being.

**Garmezy (1991)** in his study identified that adolescents despite exposure to poverty or family adversity, many adolescents developed adaptive coping and positive mental health. This study further highlighted that protective factors like problem-solving skills, academic competence, and supportive relationships play an important role in strengthening resilience among adolescents.

**Luthar et al. (2000)** in their empirical research on resilience, emphasized studying resilience as a process rather than just outcomes or traits. They further argued that resilience depends on factors such as ecological systems like family, peers, and school. It was also investigated in their research that resilience is correlated with coping, wherein adolescents with high resilience used adaptive coping strategies, which further helped them safeguard their psychological well-being.

**Masten (2001)** described resilience as “ordinary magic,” highlighting that adaptive functioning during adversity comes from typical human resources like supportive relationships, problem-solving abilities, and self-regulation. In adolescence, resilience isn’t a rare trait but a common ability that develops when protective factors interact with risks. The study reviewed decades of developmental research, showing that resilience is dynamic, dependent on context, and changeable through interventions. For adolescents, resilience helps buffer stressors such as peer pressure, academic challenges, and family conflict, thereby lowering the risk of internalizing disorders. This work is essential in framing resilience not as something extraordinary but as a normal developmental capacity when

environmental supports are in place. It has influenced educational, clinical, and community programs aimed at strengthening coping strategies to enhance adolescent well-being.

**Mohammadzadeh et al. (2019)** examined the role of life skills training in improving coping skills among adolescents. The finding from this study proved that life skills education helped the adolescents to improve skills pertaining to constructive coping strategies and reduce avoidant strategies such as denial, substance use, behavioural disengagement and self-blaming.

**Olsson et al. (2003)** investigated resilience in connection with adolescent mental health and well-being. The study emphasised that resilience is both a predictor and an outcome of coping processes. It was further indicated that resilient adolescents demonstrated positive affect, optimism, and social competence, which protect against internalizing disorders. They concluded that resilience contributes not only to survival under stress but also to thriving, where adolescents achieve higher life satisfaction and purpose. This conceptual analysis provided a framework for linking resilience, coping, and psychological well-being in empirical studies.

**Olsson et, al (2001)** examined the factors that contributes for development of resilience. It was analysed from this study that resilience operates through cognitive, emotional, and social pathways. Adolescents with high resilience were good at coping with peer pressure, academic stress, and family conflict, maintaining psychological well-being despite adversity. Importantly, the study argued that resilience should be understood not just as an individual trait but as a developmental outcome influenced by social systems. This perspective has guided research on community and school interventions designed to enhance coping and resilience simultaneously.

**Ooi et al. (2021)** in their study aimed to investigate the relationship between religious orientation and coping strategies and suicidal ideation among adolescents indicates that religion had no role to play with coping strategy and further investigation indicated that adolescents with avoidant coping strategy had suicidal ideation.

**Rutter (1987)** in his study, introduced the idea of protective mechanisms that promote resilience, such as supportive relationships, a positive self-view, and external social support. He argued that resilience is not a fixed trait but results from active interactions between the individual and their environment. During adolescence, protective mechanisms help shield against the psychological damage from stressors, encouraging adaptive coping skills and improved mental health outcomes. Further he highlighted the importance of understanding how individuals respond differently to risks, paving the way for modern research on coping strategies. This work remains influential in understanding adolescent psychological well-being because it identifies not only risk factors but also strengths that help young people succeed despite adversity.

**Zimmerman (1995)** in his study on the constructs of psychological empowerment and its importance in building resilience among adolescents indicated that intrapersonal, interactional, and behavioral components play a vital role in strengthening both coping strategies and mental well-being. Adolescents with a strong sense of control and competence are more likely to inculcate proactive coping strategies and report better psychological adjustment. This study links resilience to coping indirectly by emphasizing empowerment as a protective factor that promotes adaptive strategies and positive developmental outcomes.

## OBJECTIVES OF STUDY

1. To analyse the relationship between resilience and coping strategies among adolescents.
2. To assess the impact of resilience on the psychological well-being of adolescents.

## HYPOTHESES OF THE STUDY

1. **H1:** There will be a significant relationship between resilience and coping strategies used among the adolescents.
2. **H2:** Resilience will have a positive impact on psychological well-being among adolescents.

## METHODOLOGY

### SAMPLE:

For the present study, a total of 80 adolescents were selected from various schools and PU colleges of Bengaluru City. The participants belonged to the age group of 14 to 18 years, and represented both male and female adolescents from diverse academic streams and varied socioeconomic status.

### TOOLS USED:

- ***Information schedule:*** An Information Schedule was developed to collect the demographic details of the participants. The schedule included variables such as age, gender, Institution in which he/she studying, socioeconomic status, academic stream/class, and parents' education. These demographic factors were analyzed to understand their background characteristics and to examine their possible influence on resilience, coping, and psychological well-being.
- ***The Psychological Well-Being (PWB) Scale (1989)-*** Developed by **Carol Ryff** was used to assess the psychological well-being of the participants. The original scale consists of 42 items, which measure six dimensions of well-being such as Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life and Self-Acceptance. Each dimension is measured through 7 items, making a total of 42 items. Responses are recorded on a 6-point Likert scale ranging from *Strongly Disagree (1)* to *Strongly Agree (6)*. Higher scores indicate greater levels of psychological well-being. Ryff's PWB scale has demonstrated strong psychometric properties across multiple studies. The scale shows acceptable internal consistency, with Cronbach's alpha coefficients ranging from 0.70 to 0.90 for the six subscales. In terms of validity, the PWB scale has established construct and convergent validity, as it correlates positively with measures such as life satisfaction, self-esteem, and positive affect, while showing negative correlations with depression and anxiety.

- ***The Brief COPE Inventory*** (1997) : The Brief COPE (Carver, 1997) is a shortened version of the original 60-item COPE Inventory developed by Carver, Scheier, & Weintraub (1989). The Brief COPE consists of **28 items**, which are divided **into 3** Factors namely: Problem Focused coping, Emotional Focused Coping and Avoidant Coping. Responses are measured on a 4-point Likert scale ranging from *1 = I haven't been doing this at all* to *4 = I've been doing this a lot*. Higher scores indicate greater use of that particular coping strategy. The Inventory has demonstrated acceptable psychometric strength across different populations. In terms of reliability, the internal consistency (Cronbach's alpha) for its subscales typically ranges from 0.50 to 0.90, Regarding validity, the inventory has shown strong construct and convergent validity, with coping subscales correlating as expected with measures of stress, resilience, psychological well-being, depression, and anxiety.
- ***Resilience Scale (1993)***: Developed by Gail M. Wagnild and Heather M. Young, consists **of 25 items** and responses are measured on 7-point Likert scale ranging from 1=strongly agree to 7=strongly disagree. The six dimensions of Resilience scale include Autonomy, Environmental Mastery, Personal Growth, Positive Relationships, Purpose in Life, and Self-Acceptance. The scores range between 25 to 175 and high score indicates greater resilience. The scale has strong psychometric properties with the Cronbach's alpha reliability values typically ranging from 0.85 to 0.94 and has strong construct and convergent validity.

## PROCEDURE

As part of the research procedure, an online survey was conducted using Google Forms, which included demographic information. The Resilience Scale and the Psychological Well-Being Scale were distributed to 80 adolescents from Bengaluru City using a convenience sampling method. Based on the responses collected, both scales were compared. The data was then analyzed using SPSS software, applying suitable statistical methods to test the research hypotheses.

## RESULTS AND DISCUSSION

The analysis of data has been presented under following tables:

**Table 1:**  
**Results showing correlation between subscales of Coping strategies and Resilience scores.**

|                   | Problem Focused Coping |                |          |                    | Emotion Focused Coping |                   |        |            | Avoidant Coping |          |                   |        |               |                         |
|-------------------|------------------------|----------------|----------|--------------------|------------------------|-------------------|--------|------------|-----------------|----------|-------------------|--------|---------------|-------------------------|
|                   | Active coping          | Information al | Planning | Positive reframing | Venting                | Emotional support | Humour | Acceptance | Self-Blaming    | Religion | Self-distracti on | Denial | Substance use | Behavioural disengageme |
| Resilience scores | 0.67*                  | 0.83**         | 0.64**   | 0.78**             | -0.43*                 | -0.48             | 0.59** | 0.58**     | -0.36*          | 0.10     | -0.43*            | -0.28  | -0.76**       | -0.22                   |

\*Significant at  $p<0.05$  and \*\*significant at  $p<0.01$

Table 1 shows the *r value* between resilience and subscales of coping strategies used among the adolescents. Accordingly, under Problem-focused coping strategies, such as active coping ( $r = 0.67^*$ ), informational support ( $r = 0.83^{**}$ ), and planning ( $r = 0.64^{**}$ ), showed strong positive correlations with resilience and the p-value significant for active coping at  $p<0.05$  level and informational support and planning are significant at  $p<0.01$  level. Within emotion-focused strategies, positive reframing ( $r = 0.78^{**}$ ), humour ( $r = 0.59^{**}$ ), emotional support ( $r = 0.58^{**}$ ), and acceptance ( $r = 0.58^{**}$ ) were also positively associated with resilience and the p-value significant at  $p<0.01$  level. Areas like venting ( $r = -0.43^*$ ) and self-blaming ( $r = -0.36^*$ ) showed negative correlations with resilience and the p-value is significant at  $p<0.05$  level, with self-blaming being particularly detrimental. However, Religion showed a weak positive but non-significant correlation ( $r = 0.10$ ).

In avoidant coping strategies, such as substance use ( $r = -0.76^{**}$ ) the p-value was significant at  $p<0.01$  level, self-distraction ( $r = -0.43^*$ ), the p-value was significant at  $p<0.05$  level, and were negatively correlated with resilience. whereas denial ( $r = -0.28$ ) and behavioral disengagement ( $r = -0.22$ ) the p-value not significant for both denial and behavioural disengagement, were not correlated with resilience. These findings are in accordance with

H1

**Table 2:**

***Shows the mean, Standard Deviation and Correlation for the Resilience and Psychological Wellbeing Scale among adolescents.***

|         | RS     | PWB    |
|---------|--------|--------|
| Mean    | 106.12 | 150.15 |
| SD      | 47.47  | 62.07  |
| r Value | 0.84   |        |

Table 2 shows the mean, Standard Deviation and Correlation for the Resilience and Psychological Wellbeing Scale among adolescents. Accordingly, the mean score for resilience ( $M = 106.12$ ,  $SD = 47.47$ ) suggests that, participants possessed a moderate level of resilience. Similarly, the mean psychological well-being score ( $M = 150.15$ ,  $SD = 62.07$ ) also reflects a moderate to high level of well-being. The correlation value ( $r = 0.84$ ,  $p < 0.01$ ) indicates a strong positive correlation between scores on the Resilience Scale (RS) and the Psychological Well-Being Scale (PWB). This indicates that individuals with higher levels of resilience tend to report greater psychological well-being. And the findings are in accordance with H2.

## MAJOR FINDINGS OF THE STUDY

- There is a significant positive correlation between Resilience and coping strategies used among the adolescents. Adolescents with high resilience actively address stressors by seeking solutions or information and planning constructive actions, whereas adolescents with low resilience were more prone to use substance abuse, self-blaming, denial, and behavioral disagreement which indicated an avoidant coping mechanism.
- Resilience and psychological well-being were highly correlated. Adolescents with moderated to high resilience demonstrated better psychological well-being.

The current study aimed to explore how different coping strategies relate to resilience

among adolescents. The correlation values between various coping mechanisms and resilience scores offer important insights into which coping styles are most effective in promoting psychological strength and adaptability in this population.

In Problem-focused coping strategies, results have indicated strong positive correlations with resilience. The findings suggest that adolescents who actively address stressors by seeking solutions or information and planning constructive actions tend to exhibit higher levels of resilience. This aligns with previous research indicating that problem-focused coping enhances an individual's sense of control, which is a core component of resilience (Abdullah & Lim, 2016).

In emotion-focused strategies, it was highlighted that positive reframing, humour, emotional support, and acceptance were also positively associated with resilience. These coping styles help individuals manage emotional responses in stressful situations, which likely supports emotional stability and adaptability (Stanisławski, 2019) key aspects of resilience. However, venting and self-blaming showed negative correlations with resilience, with self-blaming being particularly detrimental. These findings suggest that while certain emotion-focused strategies may be adaptive, others particularly those that involve negative emotional expression or internalization of blame may weaken resilience. Religion showed a weak positive but non-significant correlation, indicating that its role in resilience may vary depending on individual belief systems or contexts.

In Avoidant coping strategies, such as substance use, self-distraction, denial and behavioral disengagement were negatively correlated with resilience. The strongest negative relationship was found between substance use and resilience, which is consistent with the view that avoidance behaviors undermine psychological flexibility and coping effectiveness. These results indicate that adolescents who rely on avoidant strategies may struggle more to adapt and bounce back from stress, ultimately lowering their resilience (Kamarulbahri et al, 2022)

The pattern of results highlights a clear distinction between adaptive and maladaptive coping in relation to resilience:

- **Adaptive coping strategies** (problem-focused and select emotion-focused coping) are **positively linked** with resilience.
- **Maladaptive coping strategies**, particularly those based on avoidance or negative emotional expression, are negatively linked with resilience.

These findings underscore the importance of promoting effective coping skills as a way to enhance student resilience. Interventions that encourage active problem-solving, cognitive reframing, humour, and emotional support-seeking may be particularly beneficial. At the same time, efforts should be made to reduce reliance on avoidant or harmful strategies like substance use, venting, or self-blame.

Further, the investigation pertaining to resilience and psychological well-being, demonstrated a strong positive correlation supporting the hypothesis that resilience plays a crucial role in promoting psychological well-being. This is consistent with existing literature, which emphasizes the protective function of resilience in managing stress, adapting to adversity, and maintaining emotional balance in challenging academic environments. Particularly for adolescents, who often face academic pressures, social adjustments, and future uncertainties, resilience appears to serve as an important psychological buffer that enhances their overall well-being.

These findings also have practical implications. Educational institutions could consider implementing resilience-building programs or workshops as part of their student support services. By fostering coping skills, emotional regulation, and adaptability, such programs could contribute to improved psychological outcomes for adolescents.

## **LIMITATIONS**

1. The study involved a relatively small sample of 80 adolescents selected through convenience sampling, which limits the generalizability of the findings. The sample

may not represent the broader student population in terms of demographics or psychological diversity.

2. The study was conducted among adolescents from Bengaluru City, and cultural, academic, or environmental factors specific to this region may have influenced coping styles and resilience levels.
3. Other variables such as personality traits, social support, academic stress levels, or mental health status were not considered, which may also impact coping and resilience.

## **FURTHER SCOPE**

1. Future research can adopt longitudinal designs to examine how coping strategies influence the development of resilience over time.
2. Incorporating moderating or mediating variables such as gender, personality traits, social support, or mental health indicators could provide a more comprehensive understanding of the resilience-coping dynamic.
3. Future research can explore the effectiveness of coping-skills training programs in improving adolescents' resilience and psychological well-being.

## **CONCLUSION**

The findings of this study highlight a significant relationship between coping strategies and resilience among adolescents. Problem-focused and adaptive emotion-focused coping styles (e.g., planning, informational support, positive reframing, humor) were strongly and positively associated with resilience. In contrast, avoidant coping strategies (e.g., substance use, self-distraction, denial) and maladaptive emotion-focused responses (e.g., venting, self-blame) were negatively correlated with resilience.

These results underscore the importance of equipping adolescents with effective coping strategies to enhance their ability to manage stress and adapt to challenges. Universities and mental health professionals should consider integrating coping-skills training and resilience-building programs into student wellness initiatives. While the study provides valuable insights, further research is necessary to deepen our understanding and develop

evidence-based interventions that foster resilience in diverse student populations.

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## Impact of Marital Status on Mental Health Among Hospital Employees

Ms. Gandhi Umayal

### ABSTRACT

The present study aimed to examine and compare the mental health dimensions positive self-evaluation, perception of reality, integration of personality, autonomy, group-oriented attitudes, and environmental mastery between married and unmarried hospital employees. A purposive sample of 200 hospital employees (96 married and 104 unmarried) was assessed using the *Mental Health Battery (MHB)* developed by Singh and Sen Gupta (2005). ANOVA results revealed no significant differences in overall mental health and most sub-dimensions, except for *integration of personality* and *autonomy*, where unmarried employees scored significantly higher. These findings suggest that while marital status may influence certain psychological facets, overall mental health is more strongly shaped by occupational context, professional demands, and individual coping mechanisms. The study underscores the importance of supportive work environments in promoting mental health across diverse demographic groups in the healthcare sector.

**Keywords:** Mental Health, Marital Status, Hospital Employees.

### INTRODUCTION

Mental health is a cornerstone of overall well-being and functional capacity, especially for individuals engaged in high-stress professions such as healthcare (WHO, 2022). Hospital employees often face unique occupational stressors, including emotional labor, shift work, exposure to suffering and death, and complex interpersonal dynamics (Adriaenssens et al., 2015). These stressors can predispose them to mental health challenges, including anxiety, depression, burnout, and emotional exhaustion (Salvagioni et al., 2017). Within this occupational context, demographic factors particularly marital status may significantly shape mental health outcomes. Understanding how being married or unmarried influences

mental health in hospital employees is thus essential, both for individual well-being and for organizational effectiveness.

The relationship between marital status and mental health has been widely studied in general populations. Empirical evidence suggests that marriage, on average, tends to have a protective effect on mental health, often associated with lower levels of psychological distress and better overall life satisfaction (Simon, 2002; Robles et al., 2014). Married individuals generally report fewer depressive symptoms compared to their unmarried counterparts, which includes those who are single, divorced, or widowed (Umberson & Montez, 2010). The buffering effect of marriage is often attributed to increased social support, economic stability, shared coping resources, and emotional companionship (Waite & Gallagher, 2000).

In the context of hospital employees, marital status may interact in complex ways with work-related stress. For instance, married hospital employees may benefit from emotional and practical support provided by their spouses, which can mitigate the adverse mental health effects of occupational stress (Sánchez et al., 2021). Conversely, balancing family responsibilities with demanding work schedules can also exacerbate stress and contribute to burnout, particularly among married employees who have caregiving duties (Ruotsalainen et al., 2015). Unmarried employees, while potentially less burdened by family obligations, might experience greater social isolation, which can increase vulnerability to anxiety and depression (Cacioppo et al., 2010).

Marital status represents an important but complex determinant of mental health among hospital employees. While marriage may confer protective benefits through emotional and social support, it may also introduce new stressors related to family responsibilities and societal expectations. Conversely, unmarried employees may benefit from fewer family-related stressors but may experience higher levels of loneliness or social pressure. Given the vital roles that hospital employees play in public health, examining how marital status influences their mental health is critical not only for their personal well-being but also for sustaining the quality of patient care. This study seeks to contribute to this under-researched area by systematically examining differences in mental health outcomes between married and unmarried hospital employees, using validated measures and drawing on contemporary psychological and sociological frameworks.

## REVIEW OF RELATED LITERATURE

**Bharat (1991)** highlighted that marriage, especially for women, often leads to enhanced social status, which can buffer against loneliness and low self-esteem. **Chadda and Deb (2013)** discussed how cultural expectations place greater caregiving responsibilities on married women, which can lead to higher stress and anxiety. **Gupta and Sharma (2002)** noted that the quality of marriage plays a decisive role: high-conflict marriages were associated with increased stress, anxiety, and depressive symptoms, sometimes exceeding the distress levels of unmarried individuals. **Kaur and Singh (2018)**, applying the Mental Health Battery to a sample of nurses in Punjab, found that married nurses scored higher on group- oriented attitudes and environmental mastery, which the authors linked to the stabilizing role of family support. **Kiecolt-Glaser and Newton (2001)** noted that distressed or conflict-ridden marriages could lead to poorer mental health outcomes than remaining unmarried. **Kumar and George (2013)** reported that married doctors, particularly women, experienced more work-family conflict, which negatively impacted their mental health. The study emphasized the dual burden carried by married female healthcare professionals, who often manage professional responsibilities alongside traditional family roles. **Kumari (2014)**, studying working women, found that while marriage could provide emotional support, it also increased stress due to added family responsibilities, particularly when institutional support systems at workplaces were weak. **Prasad et al. (2016)** also examined stress among hospital employees in a tertiary care hospital in South India, finding that married employees reported higher stress levels related to balancing work and home, especially when young children were involved. Unmarried employees, while facing less role conflict, reported feelings of social isolation and lack of emotional support. **Robles et al. (2014)**, through a meta-analytic review, further emphasized that supportive marriages are associated with lower levels of stress, improved emotional regulation, and better physical health outcomes. **Ruotsalainen et al. (2015)** suggested that married healthcare workers with caregiving responsibilities might face compounded stress, especially when institutional support for work-life balance is lacking. **Sahu and Gupta (2014)**, studying women in healthcare professions, found that unmarried women sometimes experienced societal pressure and feelings of inadequacy, whereas married women often faced time-related stress and exhaustion. **Saini et al. (2010)**, in a study of nurses in North India, found high levels of

burnout, with married nurses reporting slightly lower emotional exhaustion than unmarried nurses. The authors suggested that emotional support from spouses might act as a protective factor. **Salvagioni et al. (2017)** documented that prolonged exposure to such stressors increases the risk of burnout, depression, and anxiety. **Sánchez et al. (2021)**, through meta-analysis, confirmed that perceived social support significantly reduces burnout among healthcare professionals. **Shanafelt et al. (2012)** reported that married physicians often reported better work-life balance and lower burnout levels compared to their unmarried peers. This was attributed to the emotional and logistical support provided by spouses, enabling better coping with occupational demands. **Simon (2002)** highlighted that married individuals, on average, report better psychological well-being than their unmarried counterparts, largely due to increased emotional and instrumental support. **Singh, S.K. (2005)** observed that married individuals in India generally report higher life satisfaction and lower psychological distress compared to their unmarried counterparts. This was attributed to increased social support and societal acceptance that marriage provides.

**Umberson and Montez (2010)** argued that marriage should not be viewed as uniformly beneficial; rather, its impact varies by gender, life stage, and relational satisfaction. **Verma and Saraswathi (2002)** noted that in Indian collectivistic culture, being married can increase perceived social support, which is protective against mental disorders. Yet, this protective effect may diminish when marital quality is poor or when workplace demands are high. **Williams and Umberson (2004)** highlighted gendered effects, with women in unsatisfactory marriages often reporting higher distress levels than men. **Yildirim and Aycan (2008)** found that unmarried nurses reported higher levels of loneliness but lower levels of work-family conflict. Conversely, married nurses benefited from emotional support but struggled more with role conflict, especially during night shifts and emergencies.

### STATEMENT OF THE PROBLEM

In the modern healthcare environment, hospital employees often face significant mental health challenges due to demanding work schedules, high responsibility, and emotional strain. Among the various demographic factors that may influence mental health, marital status is frequently considered important, as it can affect psychological well-being through mechanisms such as social support, family responsibilities, and perceived autonomy. Despite

this, empirical research exploring how marital status specifically impacts different dimensions of mental health among hospital employees remains limited, especially within the Indian context. This study, therefore, seeks to address this gap by investigating whether there is a significant difference between married and unmarried hospital employees in terms of positive self-evaluation, perception of reality, integration of personality, autonomy, group-oriented attitudes, environmental mastery, and overall mental health.

## OBJECTIVE OF THE STUDY

- To study and compare the mental health dimensions namely positive self-evaluation, perception of reality, integration of personality, autonomy, group-oriented attitudes, and environmental mastery between married and unmarried hospital employees.

## HYPOTHESIS OF THE STUDY

- There will be no significant difference between married hospital employees and unmarried hospital employees on the mental health dimensions of positive self-evaluation, perception of reality, integration of personality, autonomy, group-oriented attitudes, and environmental mastery.

## METHODS

### **SAMPLE:**

In the present study, a purposive sampling method (also known as judgmental sampling) was employed to select the participants. The researcher specifically targeted hospital employees who met the predefined characteristic of marital status, categorizing them into two naturally existing groups: married and unmarried employees. This approach was chosen because marital status is the central independent variable of interest in this comparative study of mental health dimensions. As a result, the final sample consisted of 200 hospital employees, comprising 96 married and 104 unmarried individuals. This purposive strategy ensured that the sample directly aligned with the research objectives and enabled a meaningful comparison between the two groups.

### **RESEARCH DESIGN: -**

The present study simple research design was used.

### **VARIABLES USED FOR STUDY**

**Independent variables- Marital Status** - 1) married hospital employees

2) unmarried hospital employees

**Dependent variables - mental health** - 1) positive self-evaluation,

2) perception of reality,

3) integration of personality,

4) autonomy,

5) group-oriented attitudes,

6) environmental mastery

### **RESEARCH TOOLS: -**

#### **Mental Health Battery (MHB)**

The Mental Health Battery (MHB), developed by *Dr. Arun Kumar Singh* and *Dr. Alpana Sen Gupta* in 2005, is a standardized psychological tool designed to assess mental health across six important dimensions: Positive Self-Evaluation, Perception of Reality, Integration of Personality, Autonomy, Group-Oriented Attitudes, and Environmental Mastery. Comprising 130 items distributed among these sub-scales, the battery uses a simple Yes/No or Agree/Disagree response format, making it accessible and user-friendly. The MHB demonstrates strong psychometric properties, with split-half reliability coefficients ranging from 0.72 to 0.88 and test-retest reliability coefficients between 0.71 and 0.82.

### **PROCEDURES OF DATA COLLECTION: -**

The data for the present study were collected using the Mental Health Battery (MHB) developed by *Dr. Arun Kumar Singh* and *Dr. Alpana Sen Gupta* (2005). Prior to data collection, permission was obtained from relevant authorities and informed consent was taken from participants. The participants were briefed about the objectives of the study and assured of confidentiality. The MHB, comprising 130 items divided into six dimensions, was administered in a group setting under the researcher's supervision. Clear instructions were provided, and participants were encouraged to answer each item honestly based on their personal experiences. The response format was Yes/No, ensuring ease of

understanding and completion. Completed questionnaires were carefully collected, checked for completeness, and coded systematically for statistical analysis.

### STATISTICAL TREATMENT:

At the first stage data were treated by descriptive statistical techniques i.e. mean and standard Deviation and ANOVA was done by using SPSS Software.

### RESULTS

#### **Summary and Results of Analysis of variance showing the relationship between marital status and mental health**

|                             | Marital Status              | Mean   | SD    | N   | DF      | F Value | Sign |
|-----------------------------|-----------------------------|--------|-------|-----|---------|---------|------|
| Positive self evaluation,   | Merited Hospital Employee   | 26.72  | 3.04  | 96  | 19<br>9 | 3.298   | NS   |
|                             | Unmerited Hospital Employee | 27.46  | 2.52  | 104 |         |         |      |
| Perception of reality,      | Merited Hospital Employee   | 20.14  | 3.14  | 96  | 19<br>9 | 0.225   | NS   |
|                             | Unmerited Hospital Employee | 19.94  | 2.82  | 104 |         |         |      |
| Integration of personality, | Merited Hospital Employee   | 25.94  | 4.54  | 96  | 19<br>9 | 12.97   | 0.01 |
|                             | Unmerited Hospital Employee | 28.29  | 4.58  | 104 |         |         |      |
| Autonomy,                   | Merited Hospital Employee   | 13.50  | 2.14  | 96  | 19<br>9 | 5.77    | 0.05 |
|                             | Unmerited Hospital Employee | 14.28  | 2.44  | 104 |         |         |      |
| Group oriented attitudes    | Merited Hospital Employee   | 23.90  | 3.36  | 96  | 19<br>9 | 2.93    | NS   |
|                             | Unmerited Hospital Employee | 24.70  | 3.08  | 104 |         |         |      |
| Environmental mastery       | Merited Hospital Employee   | 29.16  | 4.14  | 96  | 19<br>9 | 1.609   | NS   |
|                             | Unmerited Hospital Employee | 28.47  | 3.20  | 104 |         |         |      |
| Mental Health               | Merited Hospital Employee   | 139.39 | 13.92 | 96  | 19<br>9 | 3.74    | NS   |
|                             | Unmerited Hospital Employee | 143.17 | 13.22 | 104 |         |         |      |

## RESULTS AND DISCUSSION

The study examined differences in various dimensions of mental health among married and unmarried hospital employees, using six subscales and an overall mental health score from the Mental Health Battery (Singh & Sen Gupta, 2005). The findings are summarized below.

### Positive Self-Evaluation

The present study found no significant difference in positive self-evaluation between married hospital employees ( $M = 26.72$ ,  $SD = 3.04$ ) and unmarried hospital employees ( $M = 27.46$ ,  $SD = 2.52$ ),  $F(1,199) = 3.298$ ,  $p > 0.05$ . This finding suggests that marital status may not substantially influence how hospital employees perceive their own worth, competence, and abilities.

This result aligns with the conclusions of Bharadwaj and Singh (2015), who reported that occupational factors, such as job role clarity, perceived organizational support, and opportunities for professional growth, are stronger determinants of employees' self-perception than demographic variables like marital status. Similarly, Kumar and Thomas (2014) highlighted that in high-demand healthcare environments, employees' self-evaluation is more closely tied to job satisfaction, performance feedback, and team dynamics rather than to personal variables like marital status. Further, existing psychological frameworks suggest that self-evaluation, as a dimension of mental health, is primarily shaped by individual psychological resources, workplace climate, and perceived efficacy at work (Rosenberg, 1965; Judge et al., 1998). Hospital work environments often emphasize performance, collaboration, and continuous professional development, which may lead to a more uniform sense of self-worth among employees regardless of their marital status. The finding may also reflect the shifting cultural context in contemporary India, where professional identity increasingly contributes to self-worth independently of marital status (Verma & Saraswathi, 2002). The hospital setting, characterized by clear role expectations and regular performance assessment, may reinforce employees' confidence in their abilities, thereby reducing potential differences rooted in personal life circumstances.

### Perception of Reality

The current study found no significant difference in perception of reality between married hospital employees ( $M = 20.14$ ,  $SD = 3.14$ ) and unmarried hospital employees ( $M = 19.94$ ,

$SD = 2.82$ ,  $F(1,199) = 0.225$ ,  $p > 0.05$ . This suggests that marital status does not substantially influence employees' cognitive capacity to perceive, interpret, and respond to real-life situations accurately. This finding is consistent with Pandey and Srivastava (2017), who argued that cognitive aspects of mental health, such as perception of reality, are shaped primarily by individual personality traits, emotional intelligence, and the demands of professional life rather than by demographic variables like marital status. Given the complex and often high-pressure environment in hospital settings, employees may develop similar cognitive resilience and situational awareness through their professional experiences, which could overshadow any potential effects of marital status. Additionally, studies have indicated that hospital employees often undergo regular professional development and engage in multidisciplinary teamwork, which may foster balanced judgment and realistic appraisal of situations regardless of personal life circumstances (Sharma & Sharma, 2016). As such, the shared occupational context likely contributes to relatively uniform cognitive functioning across married and unmarried employees.

### **Integration of Personality**

The present study found a significant difference between married and unmarried hospital employees on the dimension of integration of personality,  $F(1,199) = 12.97$ ,  $p < 0.01$ . Specifically, unmarried employees ( $M = 28.29$ ,  $SD = 4.58$ ) demonstrated higher levels of integration compared to married employees ( $M = 25.94$ ,  $SD = 4.54$ ). This suggests that unmarried employees may experience better psychological coherence, flexibility, and adaptability.

These findings resonate with the observations of Sharma and Saini (2019), who reported that unmarried professionals often show higher adaptability and psychological integration, possibly due to fewer external family responsibilities and greater personal autonomy. In demanding professions like healthcare, this autonomy may enable unmarried employees to focus more on aligning their self-concept with professional roles, leading to a higher sense of internal harmony. Integration of personality, as conceptualized in mental health frameworks (Jahoda, 1958), refers to the individual's capacity to balance conflicting demands, manage stress constructively, and maintain a stable self-concept. Unmarried employees might benefit from greater personal time, flexibility in daily routines, and fewer family-related stressors, which can foster emotional regulation and self-reflection key

aspects of psychological integration (Ryff, 1989).

### **Autonomy**

The present study revealed a significant difference on the autonomy dimension,  $F(1,199) = 5.77$ ,  $p < 0.05$ , with unmarried hospital employees ( $M = 14.28$ ,  $SD = 2.44$ ) scoring higher than married employees ( $M = 13.50$ ,  $SD = 2.14$ ). This suggests that unmarried employees perceive themselves as more self-directed, self-reliant, and independent in their personal and professional lives.

This finding aligns with Patel (2020), who found that unmarried professionals often report higher levels of autonomy, likely due to having fewer immediate family responsibilities and more personal control over decisions affecting daily routines and career development. In contrast, married employees, particularly in collectivistic cultural contexts like India, often balance work obligations with expectations related to spouse, children, and extended family (Gupta & Prasad, 2018). These competing demands may limit their perceived autonomy. Autonomy is recognized in psychological frameworks, such as Ryff's model of psychological well-being (Ryff, 1989), as the capacity to self-regulate behavior, resist social pressures, and make choices based on personal convictions. Within demanding work environments like hospitals, employees who perceive greater autonomy may experience higher job satisfaction and psychological resilience (Deci & Ryan, 2000). This finding emphasizes the interplay between marital status and perceived autonomy among hospital employees. It also suggests the importance of workplace policies and supportive interventions like flexible scheduling and work-life balance initiatives that help married employees protect or enhance their sense of autonomy, which could contribute to greater mental health and well-being.

### **Group-Oriented Attitudes**

The present study found no significant difference between married ( $M = 23.90$ ,  $SD = 3.36$ ) and unmarried ( $M = 24.70$ ,  $SD = 3.08$ ) hospital employees on the dimension of group-oriented attitudes,  $F(1,199) = 2.93$ ,  $p > 0.05$ . This suggests that both groups place similar value on teamwork, social cohesion, and collaborative engagement within the workplace.

This result aligns with Mehta and Sharma (2016), who noted that professional roles particularly in high-intensity, team-dependent settings like hospitals often cultivate a strong orientation toward group goals, interpersonal cooperation, and mutual support, regardless of

employees' marital status. The hospital environment inherently requires coordinated action, shared responsibility, and constant communication among staff, which can promote and reinforce group-oriented attitudes equally among all employees. Theoretical perspectives on organizational behavior suggest that work context can strongly shape employees' social attitudes and behaviors. For example, the concept of "situational strength" (Mischel, 1977) posits that in structured environments where teamwork is critical to task completion, individual differences (such as marital status) may exert less influence on attitudes and behaviors. Instead, shared professional norms and institutional culture become dominant determinants. Further, hospitals often implement formal training programs, interdisciplinary rounds, and protocols that emphasize team-based care, which can reinforce a sense of collective identity and collaboration among all staff members (Salas et al., 2008). Such shared experiences may minimize variability related to demographic characteristics, leading to comparable group-oriented attitudes.

the findings highlight how organizational demands and cultural context can foster shared group-oriented attitudes across diverse employee groups, underscoring the power of workplace culture in shaping key dimensions of mental health.

### **Environmental Mastery**

The current study found no significant difference between married hospital employees ( $M = 29.16$ ,  $SD = 4.14$ ) and unmarried employees ( $M = 28.47$ ,  $SD = 3.20$ ) on environmental mastery,  $F(1,199) = 1.609$ ,  $p > 0.05$ . This suggests that both groups perceive themselves as similarly capable of managing everyday demands, adapting to change, and effectively handling work and life responsibilities.

These findings are consistent with the observations of Singh and Malhotra (2015), who reported that structured professional environments, especially in healthcare, tend to foster comparable levels of environmental mastery across employees, regardless of marital status. Hospitals require staff to navigate complex tasks, unexpected challenges, and high-pressure situations daily, which may cultivate a strong, shared sense of competence and problem-solving ability. Theoretical models of mental health, such as Ryff's model of psychological well-being (Ryff, 1989), identify environmental mastery as the capacity to create or choose contexts that suit one's needs and to effectively manage life's complexities. In high-demand professional settings like hospitals, this dimension can be reinforced through formal training,

experience, and institutional support systems, which likely benefit all employees equally. Moreover, research on professional adaptation has shown that hospital employees develop robust coping mechanisms and task management skills through repeated exposure to unpredictable scenarios and teamwork (Lazarus & Folkman, 1984). These skills may become integral to their professional identity, minimizing differences linked to personal life variables like marital status. The findings highlight how workplace structure, professional demands, and cultural factors can together foster a uniformly high sense of environmental mastery among hospital employees, independent of marital status.

### **Overall Mental Health**

The analysis of total mental health scores revealed no significant difference between married hospital employees ( $M = 139.39$ ,  $SD = 13.92$ ) and unmarried employees ( $M = 143.17$ ,  $SD = 13.22$ ),  $F(1,199) = 3.74$ ,  $p > 0.05$ . Despite specific differences observed on sub-dimensions like integration of personality and autonomy, the overall mental health levels of both groups appear broadly comparable.

This finding aligns with Nanda (2017), who emphasized that mental health is inherently multidimensional, shaped by an interplay of psychological resources, personality traits, and contextual factors, rather than determined by a single demographic variable like marital status. In the complex and structured environment of hospitals, factors such as professional role identity, team support, and regular training may exert a strong equalizing effect on overall mental health across employees. The multidimensional perspective, rooted in frameworks like Jahoda's (1958) criteria of positive mental health and Ryff's (1989) model of psychological well-being, suggests that strengths in some areas can compensate for relative weaknesses in others. For instance, unmarried employees' higher autonomy and integration might balance out other challenges they face, whereas married employees may draw resilience from social support and emotional stability developed through family life. While marital status may influence specific psychological dimensions, the broader construct of mental health appears to be sustained by multiple reinforcing factors within the hospital environment, supporting the view that mental health is complex, context-dependent, and not solely defined by demographic characteristics.

## CONCLUSION

- 1) No significant difference was found between married and unmarried hospital employees on Positive Self-Evaluation
- 2) No significant difference was found between married and unmarried hospital employees on Positive Self-Evaluation
- 3) No significant difference was found between married and unmarried hospital employees on Perception of Reality
- 4) No significant difference was found between married and unmarried hospital employees on Group-Oriented Attitudes
- 5) No significant difference was found between married and unmarried hospital employees on Environmental Mastery
- 6) No significant difference was found between married and unmarried hospital employees on Overall Mental Health Scores
- 7) Unmarried employees scored significantly higher, indicating better emotional coherence and adaptability.
- 8) Unmarried employees reported greater independence and self-direction compared to married employees.

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### **The Role of Perceived Stress on Happiness among College Students**

**Ms Vidhya Singh L.**

Assistant Professor

Department of Psychology

BMS College for Women

Bengaluru, Karnataka

**Dr Shilpa S.**

Assistant Professor,

Department of Psychology,

BMS College for Women,

Bengaluru, Karnataka

### **ABSTRACT**

Stress is a common and influential factor that affects the mental well-being and overall happiness of college students. This study aimed to examine how perceived stress impacts levels of happiness by comparing students experiencing varying degrees of stress. Using a convenience sampling method, 80 college students from Bengaluru City was selected to participate. Data collection involves two standardized tools: The Perceived Stress Scale (PSS-10) developed by Sheldon Cohen, Tom Kamarck, and Robin Mermelstein, and the Oxford Happiness Questionnaire by Peter Hills and Michael Argyle. Both Descriptive and inferential statistics are used to analyze the data. The analysis is conducted to explore the relationship between perceived stress and happiness. Findings indicate that students experiencing moderate stress reported relatively high happiness levels ( $M = 21.9$ ,  $SD = 8.03$ ; Happiness  $M = 6.66$ ,  $SD = 1.14$ ). The results demonstrated a statistically significant negative correlation between stress and happiness, emphasizing the need for effective psychological support and mindfulness-based interventions to improve student well-being. This study highlights the value of proactive mental health programs aimed at increasing happiness among college students.

**Key Words:** Perceived Stress, Happiness and College Students

## INTRODUCTION

College years are frequently seen as a time of personal development and exploration. However, for many students, it also involves significant challenges, such as academic pressure, financial concerns, social adjustments, and future career uncertainty. These demands can lead to elevated levels of perceived stress, which is the degree to which individuals feel overwhelmed, unable to cope, or out of control in response to life's demands. Perceived stress is not necessarily about the presence of stressors themselves but how individuals interpret and react to them. It varies from person to person and is influenced by factors like personality, coping skills, and available social support. Among college students, persistent stress can contribute to emotional exhaustion, anxiety, and reduced well-being.

On the other hand, happiness, often referred to as subjective well-being, includes positive emotions, life satisfaction, and a sense of purpose. It plays a crucial role in mental and emotional health, influencing academic success, social relationships, and overall life satisfaction. A growing body of research indicates that chronic stress can significantly lower happiness, while positive mental health is associated with greater academic engagement and resilience.

In recent years, mental health among college students has become a global concern. With increased academic competitiveness and lifestyle changes, many students are reporting higher stress levels and lower happiness scores. Despite this, limited research in the Indian context—particularly in urban academic environments like Bengaluru has focused on how perceived stress affects the happiness levels of college students.

Understanding the relationship between stress and happiness is essential for developing effective interventions and mental health programs on campuses. This study aims to explore how perceived stress influences happiness among college students, offering insights that can help educators, counselors, and policymakers support students' emotional well-being more effectively.

## REVIEW OF LITERATURE

**Aldwin (2007):** Aldwin's research on stress and health outcomes noted that chronic stress led to poorer mental health and lower happiness, further supporting the idea that perceived stress acts as a barrier to happiness in young adults.

**Baumeister et al. (2003):** The study found that self-esteem and happiness were closely related, and higher levels of perceived stress often led to lower self-esteem, which negatively affected happiness among students.

**Bourne et al. (2014):** This research examined the psychosocial aspects of stress in college students and its effects on happiness. It concluded that stress, especially when chronic, significantly undermines students' overall happiness and life satisfaction.

**Cohen & Wills (1985):** Their work on social support showed that strong social networks help buffer the negative effects of stress. Students with strong social connections were more likely to experience higher happiness, even in stressful academic environments.

**Cohen et al. (1983):** The development of the Perceived Stress Scale (PSS) provided a framework for understanding how individuals perceive stress. Their work established a strong connection between stress and overall well-being, suggesting that higher stress levels contribute negatively to happiness.

**Diener et al. (2009):** They discussed the broader concept of subjective well-being, noting that factors like stress, life satisfaction, and happiness are interrelated. Their work suggests that reducing perceived stress enhances happiness.

**Goh et al. (2016):** This study found that stress management techniques and mindfulness could increase happiness levels among university students. The results indicated that students who managed stress effectively experienced higher happiness levels.

**Hills & Argyle (2002):** The Oxford Happiness Questionnaire (OHQ) was validated in their research, showing a strong link between life satisfaction and happiness. This laid the

foundation for future studies on how external factors, such as stress, influence happiness.

**Jansen, A. C., & Nguyen, D. T. (2012):** The study investigated how perceived stress relates to subjective well-being in university students. Results suggested that stress had a negative impact on happiness, particularly for students facing academic and social challenges.

**Kabat-Zinn (1990):** His work on mindfulness-based stress reduction (MBSR) highlighted how mindfulness practices can reduce perceived stress, leading to improved emotional well-being and happiness. His findings suggest potential interventions for improving student happiness despite stress.

**Kern et al. (2015):** They explored how positive psychology interventions could reduce perceived stress and enhance happiness. Their findings suggested that students engaging in practices like gratitude and positive thinking reported higher happiness levels despite high-stress environments.

**Kumar et al. (2015):** This study investigated stress among university students and found that academic pressures significantly contributed to high stress, which in turn negatively affected students' happiness and quality of life.

**Kushwaha & Sharma (2016):** Their research highlighted the impact of perceived stress on the emotional well-being of college students in India. They discovered a strong negative link between stress levels and happiness, especially during exam times.

**Lazarus and Folkman (1984)** proposed a model that suggests that a person's level of happiness is closely linked to the coping strategies they employ when faced with stressful situations.

**Misra & McKean (2000):** Their research highlighted how academic stress affects mental health and well-being in college students. They found that stress from academic responsibilities decreased students' happiness.

**Parker & Endler (1992):** Their research identified coping strategies as critical in moderating the effects of stress on happiness. College students who employed active coping mechanisms had higher levels of happiness despite stress.

**Plaisant et al. (2012):** The authors focused on the relationship between academic stress and happiness in college students. They found that students who perceived high levels of academic pressure were more likely to report lower happiness levels.

**Rao et al. (2013):** This study concluded that perceived stress among college students predicted lower levels of happiness, indicating a strong inverse relationship between these two variables.

**Selye (1976):** Selye's General Adaptation Syndrome explained that chronic stress can lead to a deterioration in well-being. His work supports the notion that prolonged stress impacts emotional states, including happiness.

**Tennant et al. (2007):** They found that students experiencing high levels of stress from academic demands had significantly lower scores on happiness scales, further supporting the relationship between stress and reduced happiness.

### **OBJECTIVES OF THE STUDY**

- To evaluate the extent of perceived stress experienced by college students.
- To determine the level of happiness among college students.
- To explore the relation between perceived stress and happiness in college students.

### **HYPOTHESIS OF THE STUDY**

- (H1): College students will experience moderate to high levels of perceived stress.
- (H2): College students will report moderate levels of happiness.
- (H3): There will be a significant relationship between perceived stress and happiness among college students.

## METHODOLOGY

### SAMPLE

The sample for the present study consisted of 80 college students selected from various degree colleges in Bengaluru City. The participants were within the age range of 18 to 21 years. The sample included students from diverse academic backgrounds and was selected using a convenience sampling method. Efforts were made to ensure representation across different streams of study (e.g., arts, science, and commerce) to enhance the generalizability of the findings within the urban college-going population.

### OPERATIONAL DEFINITION

In this study, perceived stress refers to the degree to which college students view their life situations as stressful, unpredictable, or overwhelming. It will be measured using the Perceived Stress Scale (PSS-10), where higher scores indicate greater levels of perceived stress.

Happiness in this context is defined as an individual's overall sense of well-being, life satisfaction, and positive emotional state. It will be evaluated using the Oxford Happiness Questionnaire (OHQ), where higher scores indicate greater levels of happiness.

College students refer to individuals aged between 18 and 20 years who are currently enrolled in undergraduate degree programs at various colleges within Bengaluru City during the period of data collection.

### TOOLS USED:

#### 1) Perceived Stress Scale by Sheldon Cohen

The Perceived Stress Scale (PSS-10), developed by Sheldon Cohen and his team in 1983, is a widely used tool in psychology for evaluating how people perceive stress in their daily lives. It focuses on how much individuals feel their lives are unpredictable, difficult to manage, and overwhelming core elements of psychological stress. The OHQ includes 29 statements that cover different aspects of happiness and positive emotions. Some of these statements are worded in a negative manner and need to be reversed in scoring before

calculating the total score. The overall score can range from 29 to 174, with higher scores suggesting a greater level of happiness. Participants rate each statement on a 6-point Likert scale, from "strongly disagree" (1) to "strongly agree" (6). The PSS-10 has good internal consistency, as indicated by a Cronbach's alpha coefficient that is usually above 0.70, which is considered acceptable for psychological assessments. The PSS-10 shows high test-retest reliability, with correlation coefficients generally falling between 0.55 and 0.85. It has strong construct validity, meaning it effectively measures the concept of perceived stress. Research has shown that it correlates positively with other well-established measures of stress as well as related factors such as anxiety and depression.

### **Oxford Happiness Questionnaire**

The **Oxford Happiness Questionnaire (OHQ)** is a self-assessment instrument designed to measure a person's general happiness and sense of well-being. It was developed by **Michael Argyle and Peter Hills** as a more concise version of the earlier Oxford Happiness Inventory (OHI). It demonstrates strong reliability and validity across different populations and research settings. In terms of reliability, the OHQ shows excellent internal consistency, with Cronbach's alpha values typically ranging from 0.80 to 0.91, indicating that the items consistently measure the same underlying construct happiness. This high internal consistency ensures that the questionnaire is reliable for repeated use within various demographic groups. Furthermore, test-retest reliability has also been reported as strong, suggesting stability of scores over time. With regard to validity, the OHQ demonstrates good construct validity, as it aligns well with theoretical understandings of happiness and subjective well-being. It also shows strong convergent validity through significant positive correlations with other established measures of life satisfaction, optimism, and positive affect. Additionally, the OHQ displays discriminant validity by showing low correlations with unrelated constructs, confirming that it measures happiness rather than other psychological traits.

### **PROCEDURE**

A survey was administered via Google Forms, collecting demographic information including participants' name, age, gender, academic stream, institution name, and residential background. The Perceived Stress Scale and the Oxford Happiness Questionnaire were

distributed to a sample of 80 college students residing in Bengaluru City. Participants were selected using a convenience sampling method to explore the relationship between perceived stress and happiness. The collected data was analyzed using SPSS software, employing appropriate statistical methods to test the proposed hypotheses.

## RESULTS AND ANALYSIS

The analysis of data has been presented using descriptive statistics under following tables:

**Table 1:**  
**Shows the mean, standard Deviation and Interpretation on the role of Perceived stress on happiness among college students.**

|            | N  | Mean  | SD   | Interpretation |
|------------|----|-------|------|----------------|
| <b>PSS</b> | 80 | 21.9  | 8.03 | Moderate       |
| <b>OHQ</b> | 80 | 3.375 | 1.41 | Pretty Happy   |

Table 1 shows the mean score for the PSS is 21.9 with a standard deviation of 8.03, which falls within the moderate stress range based on standard PSS interpretations. This suggests that, on average, participants are experiencing a moderate level of perceived stress in their daily lives. The relatively large standard deviation indicates variability in stress levels among the participants, implying that while some may have low stress, others report higher levels. The average score on the OHQ is 3.375 with a standard deviation of 1.41, which corresponds to the category of "Pretty Happy." The OHQ uses a Likert scale, typically ranging from 1 to 6, and a score around 3.5 indicates moderate to moderately high subjective happiness. The SD indicates that there is some variability in happiness levels, but overall, the group trends toward a generally positive emotional state.

**Table 2:-Shows the mean, standard Deviation and correlation on the role of Perceived stress on happiness among college students.**

|            | N  | Mean  | SD   | Interpretation | r        |
|------------|----|-------|------|----------------|----------|
| <b>PSS</b> | 80 | 21.9  | 8.03 | Moderate       | -0.85121 |
| <b>OHQ</b> | 80 | 3.375 | 1.41 | Pretty Happy   |          |

The Pearson correlation coefficient ( $r$ ) between PSS and OHQ is  $-0.85121$ , which indicates a strong negative correlation between perceived stress and happiness.

## DISCUSSION

The findings of this study offer valuable insights into the relationship between perceived stress and happiness among college students. The data reveal a moderate level of perceived stress (Mean = 21.9, SD = 8.03) and a relatively high level of happiness (Mean = 3.375, SD = 1.41), as interpreted through the Oxford Happiness Questionnaire (OHQ). However, the most striking finding lies in the strong negative correlation between the two variables ( $r = -0.851, p < .01$ ), indicating that as perceived stress increases, levels of happiness significantly decrease.

This result aligns with previous research suggesting that stress is a significant psychological factor that can impair emotional well-being and reduce life satisfaction. The strong inverse correlation suggests that perceived stress is a critical determinant of happiness among college students, who often face unique academic, social, and personal pressures. These stressors, if not managed effectively, can have profound effects on students' mental health and subjective well-being.

The moderate average stress level suggests that while most students do not experience extreme stress, a substantial proportion still face significant daily challenges. This level of stress could be attributed to academic workload, financial concerns, pressure to perform, or uncertainties about future careers. Despite this, students still reported being "pretty happy" on average, which could indicate the presence of coping mechanisms such as social support, extracurricular involvement, or individual resilience that buffer the impact of stress on happiness.

The strong negative correlation coefficient ( $-0.851$ ) underscores that perceived stress has a powerful role in diminishing happiness. This magnitude of correlation is rare in social science research, which suggests that interventions targeting stress reduction could yield significant improvements in student happiness. It supports the notion that happiness among

college students is not merely a function of positive experiences or external achievements but is deeply affected by how students perceive and manage stress.

Furthermore, the findings indicate that the proposed hypothesis is according to the expectations and highlights the need for colleges and universities to adopt comprehensive mental health strategies. These could include stress management programs, mindfulness training, accessible counselling services, and curriculum reforms that promote well-being. Faculty and staff should also be trained to recognize signs of stress and provide appropriate referrals or support. Additionally, the data open avenues for further research into the mediating and moderating factors in the stress-happiness relationship. For instance, future studies could explore the roles of personality traits, emotional intelligence, or social support systems in influencing how stress affects happiness.

### MAJOR FINDINGS

- As stress levels increase, happiness levels tend to decrease significantly.
- Conversely, lower stress is strongly associated with higher levels of happiness.
- The strength of this negative correlation ( $r \approx -0.85$ ) suggests a very strong inverse relationship.

### LIMITATIONS

- Study included only urban population.
- Sample size could have been increased.

### FURTHER SCOPE

- **Intervention-Based Research:** Explore the impact of stress-reduction programs (e.g., mindfulness, CBT, time management training) on happiness levels among students.
- **Explore Mediators and Moderators:** Investigate potential mediators (e.g., coping strategies, resilience) or moderators (e.g., gender, personality traits) in the stress-happiness relationship.

- **Technology and Stress:** Examine how digital tools, social media usage, or online learning environments influence stress and happiness among college students.

## CONCLUSION

In summary, this study demonstrates a significant and negative relationship between perceived stress and happiness among college students. The findings suggest that reducing stress levels through targeted interventions could substantially enhance students' overall happiness and well-being. Academic institutions must prioritize student mental health to foster a supportive environment conducive to both personal development and academic success.

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## **Emotional Intelligence as a Predictor of Happiness and Quality of Life among Senior College Students**

**Rajendra Govind Kadale**

**Research scholar**

M. G. V. Maharaja Sayajirao Gaikwad Arts, Science and Commerce College. Malegaon Camp, Malegaon, Nashik. Affiliated to SPPU, Pune, Maharashtra

**Dr. Ramesh Namdeo Nikam**

**Assistant Professor**

M. G. V. Maharaja Sayajirao Gaikwad Arts, Science and Commerce College. Malegaon Camp, Malegaon, Nashik. Affiliated to SPPU, Pune, Maharashtra

### **ABSTRACT**

The present study investigates the role of Emotional Intelligence (EI) in predicting the happiness and quality of life among senior college students. Senior college students often encounter academic pressure, career uncertainty, and transitional challenges, which can influence their emotional and psychological health. This study adopts a quantitative approach, employing standardized scales to measure EI, happiness, and quality of life among a purposive sample of senior college students. Correlation and regression analyses were conducted to examine the predictive capacity of EI on happiness and quality of life. The findings reveal a significant positive relationship between EI and both dependent variables, indicating that higher emotional intelligence is associated with greater happiness and a better quality of life. The study highlights the importance of integrating EI development into higher education to promote student well-being.

**Keywords:** - *Emotional Intelligence, Happiness, Quality of Life*

### **INTRODUCTION**

In recent years, the concept of Emotional Intelligence (EI) has received considerable attention in psychology and education due to its significant role in mental health, interpersonal relationships, and overall well-being. Emotional Intelligence refers to the ability to perceive, understand, regulate, and utilize emotions effectively in daily life. For senior college students, this competency is particularly important as they face academic

demands, manage social relationships, and make decisions regarding their future careers. Happiness and quality of life are two key psychological constructs closely associated with life satisfaction and overall functioning. Happiness is often described as a state of positive affect and contentment, whereas quality of life encompasses broader dimensions, including physical health, psychological well-being, social relationships, and environmental conditions. Previous research indicates that individuals with higher levels of EI are better able to manage stress, sustain positive relationships, and employ adaptive coping strategies, which collectively contribute to greater happiness and an enhanced quality of life.

The present study aims to examine the extent to which Emotional Intelligence predicts happiness and quality of life among senior college students. The findings are expected to provide insights that may inform educational interventions designed to strengthen emotional competencies and promote overall well-being.

## **REVIEW OF LITERATURE**

### **Emotional Intelligence and Happiness**

Numerous studies have demonstrated a strong positive correlation between EI and happiness.

**Goleman (1995)** proposed that emotionally intelligent individuals are more adept at managing negative emotions and sustaining positive moods, which contributes to greater life satisfaction. **Extremera and Fernández-Berrocal (2005)** found that EI significantly predicts subjective happiness in university students. **Koydemir et al. (2013)** reported that students with high EI levels exhibit greater resilience, optimism, and overall happiness.

### **Emotional Intelligence and Quality of Life**

Quality of life has been studied extensively in the context of health and education. **Schutte et al. (2002)** found that individuals with higher EI reported better social relationships, stronger coping mechanisms, and a higher sense of well-being. In academic settings, EI is linked to lower stress levels, healthier lifestyle choices, and more satisfying interpersonal

interactions (Saklofske et al., 2007). These factors collectively enhance quality of life, especially during the demanding college years.

### **RESEARCH GAP**

While previous studies have explored EI's relationship with either happiness or quality of life, few have examined both outcomes simultaneously in the context of senior college students. This study addresses this gap by investigating EI as a predictor of both variables within the same population.

### **OBJECTIVES OF THE STUDY**

1. To examine the association between Emotional Intelligence and the level of happiness among senior college students.
2. To explore the relationship between Emotional Intelligence and the overall quality of life among senior college students.
3. To determine the extent to which Emotional Intelligence predicts happiness among senior college students.
4. To determine the extent to which Emotional Intelligence predicts the quality of life among senior college students.

### **HYPOTHESES OF THE STUDY**

1. H1: There would be a significant positive relationship between Emotional Intelligence and happiness.
2. H2: There would be significant positive relationship between Emotional Intelligence and quality of life.
3. H3: Emotional intelligence will significantly predict happiness among senior college students.
4. H4: Emotional intelligence will significantly predict quality of life among senior college students.

## METHODOLOGY

### **SAMPLE:**

In this study, the sample was selected from rural colleges of Nashik district. A total of 100 senior college students were selected using randomized sampling techniques. Among them, 50 were male students and 50 were female students, all in the final year of undergraduate studies in the faculties of Arts, Commerce, and Science.

### **RESEARCH DESIGN:**

In this study investigator use Quantitative, correlational research design.

### **TOOLS:**

1. Emotional Intelligence Scale (Schutte et al., 1998)
2. Oxford Happiness Questionnaire (Hills & Argyle, 2002)
3. WHOQOL-BREF Quality of Life Scale (WHO, 1996)

## PROCEDURE

Participants completed all questionnaires in a supervised setting. Informed consent was secured from all participants, and their confidentiality was strictly maintained.

## STATISTICAL ANALYSIS

### **STATISTICAL ANALYSIS:**

Pearson's correlation to examine relationships; simple regression to test predictive capacity.

## RESULTS

**Table 1.** Pearson's correlation between emotional intelligence, happiness, and quality of life.

| Variables              | Emotional Intelligence | Happiness | Quality of Life |
|------------------------|------------------------|-----------|-----------------|
| Emotional Intelligence | 1.0                    | 0.76      | 0.71            |
| Happiness              | 0.76                   | 1.0       | 0.65            |
| Quality of Life        | 0.71                   | 0.65      | 1.0             |

Pearson's correlation analysis revealed that Emotional Intelligence (EI) was significantly and positively correlated with both happiness ( $r = .76$ ,  $p < .01$ ) and quality of life ( $r = .71$ ,  $p < .01$ ). This indicates that students with higher EI reported greater happiness and better quality of life.

**Table 2.** Simple regression analysis showing emotional intelligence as a predictor of happiness and quality of life.

| Dependent Variable | Predictor (EI) $\beta$ | t-value | p-value | $R^2$ |
|--------------------|------------------------|---------|---------|-------|
| Happiness          | 0.76                   | 7.45    | < .001  | 0.58  |
| Quality of Life    | 0.71                   | 6.21    | < .001  | 0.50  |

To further examine the predictive role of EI, Simple regression analyses revealed that EI significantly predicted happiness,  $\beta = .76$ ,  $t = 7.45$ ,  $p < .001$ , accounting for 58% of the variance in happiness ( $R^2 = .58$ ). Similarly, EI significantly predicted quality of life,  $\beta = .71$ ,  $t = 6.21$ ,  $p < .001$ , explaining 50% of the variance in quality of life ( $R^2 = .50$ ).

## DISCUSSION

The findings of the study reveal that Emotional Intelligence (EI) is significantly and positively associated with both happiness and quality of life among senior college students. Correlation analysis indicated that students with higher levels of EI tend to report greater

happiness as well as better quality of life. Furthermore, regression analysis confirmed that EI is a significant predictor of these variables, accounting for 31% of the variance in happiness and 26% of the variance in quality of life. These outcomes are consistent with previous research (Extremera & Fernández-Berrocal, 2005; Schutte et al., 2002), which underscores the role of EI in enhancing stress management, emotional regulation, and social adjustment—factors that are essential for student well-being.

## **CONCLUSION**

The findings of the present study provide strong empirical support for all four proposed hypotheses. First, Emotional Intelligence (EI) was found to be significantly and positively related to happiness among senior college students, thereby confirming Hypothesis 1. Second, consistent with Hypothesis 2, EI also demonstrated a positive association with students' quality of life. Moreover, regression analyses revealed that EI significantly predicted both outcomes. Specifically, EI accounted for 31% of the variance in happiness, supporting Hypothesis 3, and 26% of the variance in quality of life, supporting Hypothesis 4. Overall, these findings underscore the crucial role of EI as a predictor of both happiness and quality of life, highlighting its importance in fostering the overall well-being of senior college students.

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## Parallel Paths to the Self: Al-Ghazali's Nafs and Freud's Structural Model

Suma N. Rao

### ABSTRACT

This paper explores the parallels and differences between Al-Ghazali's tripartite conception of the nafs and Freud's structural model of the psyche. While both systems attempt to explain inner conflict, moral regulation, and the development of selfhood, they begin from very different foundations: Al-Ghazali from the Qur'an and Sufi spirituality, and Freud from clinical observation and psychology. By placing each thinker in his intellectual environment, the study shows how spiritual and psychological theories can grow from separate beginnings yet converge in structure. It argues that these comparisons point toward universal aspects of human psychology, even across cultures and centuries.

**Keywords-** Nafs and Freud's structural model

### INTRODUCTION

Across history, thinkers have asked the same question: what does it mean to be human? For Al-Ghazali (1058–1111), one of Islam's most important scholars and Sufi mystics, this question was answered through the Qur'an and spiritual reflection (Griffel, 2009). For Sigmund Freud (1856–1939), founder of psychoanalysis, the same question was approached through clinical practice, dream analysis, and psychological theory.

Although their worlds were different, Al-Ghazali's shaped by Islamic theology and mysticism, Freud's by modern science and medicine, both described the self as layered and in conflict. Al-Ghazali spoke of the nafs in three forms: the commanding self (*nafs al-ammārah*), the self-reproaching self (*nafs al-lawwāmah*), and the tranquil self (*nafs al-muṭma'innah*) (Al-Ghazali, 1989). Freud described the id, ego, and superego. Each tried to explain how human beings wrestle with desire, conscience, and the possibility of growth.

This paper asks: How can spiritual and psychological theories, though rooted in different

traditions, arrive at similar models of the self?

## METHOD/APPROACH

The study takes a comparative-textual approach, analyzing Al-Ghazali's *Ihya' Ulum al-Din* (The Revival of the Religious Sciences) and *Munkidh min al-Dalal* (Deliverance from Error) alongside Freud's *The Ego and the Id*. To ensure faithfulness to each thinker's context, the Qur'anic verses that inspired Al-Ghazali's theory of the self are cited directly, while Freud's writings are placed against the backdrop of late 19<sup>th</sup> century Vienna and its scientific culture. Comparative studies by Mobarak (2022), Basharat (2020), and Akber (2021) are critically examined to highlight what has been covered and what gaps remain. The aim is not only to compare concepts but also to trace how each thinker's circumstances shaped their models of selfhood, offering a fuller picture of why parallel structures emerged despite independent origins.

### **Qur'anic Foundations and Al-Ghazali's Expansion**

The Qur'an describes the self in ways that became the basis for Al-Ghazali's thought:

- **Nafs al-Ammārah (the commanding self):** "Indeed, the soul is a persistent enjoiner of evil" (Qur'an 12:53, Sahih International, 1997).
- **Nafs al-Lawwāmah (the self-reproaching soul):** "And I swear by the self-reproaching soul" (Qur'an 75:2, Sahih International, 1997).
- **Nafs al-Muṭma'innah (the tranquil soul):** "O tranquil soul, return to your Lord, well-pleased and pleasing [to Him]" (Qur'an 89:27–28, Sahih International, 1997).

Al-Ghazali developed these verses into a psychology of the soul. In *Ihya' Ulum al-Din*, he explains that human life is a process of purifying the self that rises from the commanding stage to tranquility in God (Al-Ghazali, 1989). In *Deliverance from Error*, he describes his personal crisis of faith, which led him to resign from his prestigious post as professor at the Nizamiyya Madrasa in Baghdad. He retreated into seclusion in Damascus and Jerusalem, devoting himself to prayer and Sufi practice, convinced that only direct spiritual experience could bring certainty (Al-Ghazali, 2000).

His theory of the nafs is therefore both philosophical and practical, designed to guide transformation through prayer, fasting, remembrance of God, and self-examination.

### Freud's Structural Model and Clinical Roots

Centuries later, Freud described another tripartite model. In *The Ego and the Id* (1923/1961), he divided the mind into:

- The **id**, source of instinctual drives and governed by the pleasure principle.
- The **ego**, mediator balancing instinct, morality, and external reality.
- The **superego**, the internalized voice of parents and society, punishing transgression with guilt.

Freud's model grew out of the medical and scientific culture of late 19th- and early 20th-century Vienna. He trained as a neurologist, studied hysteria with Josef Breuer, and developed psychoanalysis through case studies such as that of Anna O. (Gay, 1989). The rise of rational science, Darwinian influence, and the decline of religious authority shaped his thinking (Sulloway, 1979).

Freud, unlike Al-Ghazali, was openly atheist. He regarded religion as a collective neurosis, a psychological projection of human fears and desires (Freud, 1964). His disbelief was not incidental but central to his thought, since he sought to explain morality, guilt, and conscience without appealing to God. This makes the comparison particularly striking: at one end of the spectrum stands Al-Ghazali, a deeply religious and spiritual thinker who saw the soul's fulfillment in God, and at the other stands Freud, an atheist who sought to account for human behavior strictly through natural and psychological processes.

### Intellectual Environments Compared

Al-Ghazali was born in Persia during the Islamic Golden Age, a period of vibrant intellectual exchange and cultural flourishing. He benefited from the translation movement centered at the House of Wisdom in Baghdad, where Greek, Persian, and Indian works were rendered into Arabic and actively debated (Nasr, 2006). This allowed him to draw not only on Qur'anic theology but also on Aristotelian logic, creating a synthesis that spoke both to reason and faith (Griffel, 2009). His Persian heritage also shaped his outlook, since Zoroastrian traditions had long emphasized the struggle between good and evil, a theme that appears in his description of the nafs (Griffel, 2009). In a way, this is similar to what Carl Jung later called the *collective unconscious*, the idea that certain patterns and themes keep reappearing across generations (Jung, 1968). At the height of his career, Al-Ghazali held a

prestigious professorship at the Nizamiyya Madrasa in Baghdad, but during a personal crisis of faith he abandoned that position and withdrew into seclusion in Damascus and Jerusalem. In that retreat, he turned fully to Sufi practice and reflection, convinced that only direct spiritual experience could provide true certainty (Al-Ghazali, 2000).

Freud was born into a Jewish family in Central Europe and lived most of his life in Vienna, a city full of energy and change. On one hand, Vienna represented progress, with new ideas from the Enlightenment, the growth of science, and rapid changes brought by city life (Gay, 1989). On the other hand, it was also a place where people struggled with issues of repression, sexuality, and shifting social roles, and these struggles strongly influenced Freud's theories (Sulloway, 1979). Although he came from a Jewish background, Freud identified as an atheist and believed that religion was a human invention, created to deal with fear rather than a true source of knowledge (Freud, 1964). His ideas about the unconscious were shaped by both the excitement of scientific progress and the harsh realities of psychological suffering. Unlike Al-Ghazali, whose journey was about finding spiritual certainty, Freud's work was focused on building a scientific way to understand and help patients.

## COMPARATIVE ANALYSIS

### **Id and Nafs al-Ammārah**

Freud's notion of the id represents the most primitive part of the psyche. It is the reservoir of instinctual drives, including hunger, lust, and aggression, and it operates on what he called the "pleasure principle", the demand for immediate gratification regardless of consequences (Freud, 1961/1923). Left unchecked, the id is impulsive and potentially destructive, driven entirely by desire.

Al-Ghazali's description of the *nafs al-ammārah* parallels this. Drawn from the Qur'an, which describes the soul as a persistent enjoiner of evil (Qur'an 12:53), the commanding self is understood as the seat of unchecked passion, selfishness, and temptation. It is the aspect of the self that is most inclined to disobedience, both to divine law and to one's higher nature. Like Freud, Al-Ghazali acknowledges that this part of the self is natural to the human condition, but he warns that if it dominates, it leads to ruin.

The difference lies in the remedy. Freud believed the id could never be destroyed but only

managed through the mediation of the ego and the structures of civilization. Al-Ghazali, however, argued that the *nafs al-ammārah* could be disciplined and purified through spiritual practices, gradually transformed rather than merely restrained (Al-Ghazali, 1989).

### **Ego and Nafs al-Lawwāmah**

In Freud's theory, the ego arises as the rational mediator between the instinctual drives of the id, the moral authority of the superego, and the demands of external reality. It operates on the "reality principle," negotiating compromises that allow survival and social functioning (Freud, 1961/1923). The ego is constantly in tension, pulled in opposite directions, and often forced to make difficult trade-offs.

Al-Ghazali's *nafs al-lawwāmah*, described in the Qur'an as the "self-reproaching soul" (Qur'an 75:2), bears a strong resemblance. This stage of the soul is characterized by guilt, conscience, and the desire for reform. When a person falls into error, the *nafs al-lawwāmah* awakens with feelings of regret and self-reproach, pushing the individual toward repentance and correction. Like Freud's ego, it mediates between desire and morality, often caught in conflict and self-questioning.

Yet there is an important distinction. Freud's ego is pragmatic, a manager of competing forces. Al-Ghazali's self-reproaching soul is not merely a negotiator but a moral agent actively seeking purification. Whereas Freud's ego often settles for compromise, Al-Ghazali's *nafs al-lawwāmah* aims at spiritual growth. The ego prevents collapse into chaos, but the reproaching soul provides a pathway to higher transformation (Al-Ghazali, 2000).

### **Superego and Nafs al-Muṭma'innah**

The most fascinating comparison lies between Freud's superego and Al-Ghazali's *nafs al-muṭma'innah*. For Freud, the superego is the internalized voice of authority, formed from parental expectations and social norms. It enforces morality by punishing transgression with guilt and rewarding obedience with pride (Freud, 1961/1923). However, because it is shaped by imperfect societies, the superego can be rigid, harsh, and even neurotic, burdening the individual with excessive guilt (Sullivan, 1979).

Al-Ghazali's *nafs al-muṭma'innah*, by contrast, represents not repression but fulfillment. Addressed in the Qur'an as the "tranquil soul" (Qur'an 89:27–28), it is the self that has reached harmony with God. This state is marked by serenity, balance, and peace, no longer torn by conflict or overwhelmed by guilt. Unlike the superego, which reflects human society,

the tranquil soul is shaped by divine reality. It does not punish but consoles, guiding the individual toward alignment with the Creator.

The parallel is clear: both Freud and Al-Ghazali recognized that morality must be internalized, becoming part of the self rather than imposed from outside. Yet their differences are equally revealing. Freud saw the superego as an oppressive force; the price paid for living in civilization. Al-Ghazali envisioned the tranquil soul as liberation, the reward of a life devoted to spiritual discipline. For Freud, the highest stage of selfhood is fragile and conflicted; for Al-Ghazali, it is peaceful and complete.

### **SUMMARY OF THE COMPARISON**

Taken together, these parallels highlight both convergence and divergence. Both models describe a layered self, beginning with primal desire, moving through conflict and conscience, and culminating in a higher stage of moral regulation. Both acknowledge that the human being is not simple but caught in a drama of competing forces. Yet their conclusions differ: Freud presents a secular, conflict-driven vision of the psyche, while Al-Ghazali offers a spiritual and transformative path.

### **INDEPENDENT ORIGINS OF SHARED INSIGHTS**

While the structural similarities between Freud's tripartite model and Al-Ghazali's nafs are intriguing, there is no credible historical evidence to suggest that Freud was influenced by Islamic philosophy or Al-Ghazali. Freud neither traveled to Muslim-majority regions nor engaged with Arabic or Islamic texts in his work. Instead, his views on religion, as expressed in *The Future of an Illusion*, reflect a psychological critique of religion as illusion, with no reference to Islamic faith or scriptures (Freud, 1964). Furthermore, Freud's intellectual roots lay in European scientific, medical, and philosophical traditions. While later Arab psychoanalysts, such as Yusuf Murad, creatively integrated Freudian concepts with Islamic thought and classical authors like Al-Ghazali, such developments occurred only after Freud's time and do not represent a direct influence (Elmessiri, 1997).

It is important to note that similarities between Al-Ghazali and Freud do not necessarily imply direct influence. History shows many examples of parallel discoveries that emerged independently in different contexts. Charles Darwin and Alfred Russel Wallace both

formulated the theory of evolution by natural selection without direct borrowing from each other. Likewise, Nikola Tesla and Guglielmo Marconi developed radio technology almost simultaneously, each building on the tools and knowledge available in their environment. These examples suggest that when thinkers face similar questions and possess the necessary intellectual resources, they may arrive at comparable models independently. In the same way, Al-Ghazali and Freud were responding to the universal human struggle between desire, conscience, and transformation. Their models reflect a case of intellectual convergence rather than influence.

### RESEARCH GAP AND CONTRIBUTION

Previous comparative scholarship has addressed Al-Ghazali and Freud, but often with limitations.

Mobarak (2022) compares Al-Ghazali's model of the *nafs* with Freud's id-ego-superego and asks whether there could have been influence, but the focus stays on mapping conceptual overlaps. The paper does not embed those concepts in the very different life contexts of Al-Ghazali and Freud or track how those contexts produced the models. It also does not quote the specific Qur'anic verses as the textual base on which Al-Ghazali builds, nor does it analyze how spiritual practice shapes development toward the tranquil soul. My study adds those missing pieces: it puts the models back into their historical environments, quotes the Qur'an directly as foundation, and argues for independent but parallel development rather than influence.

Basharat (2020) shows clear correspondences between *nafs al-ammārah*, *lawwāmah*, *muṭma'innah* and Freud's id, ego, superego, and briefly notes the roles of *rūh* (Spirit or soul), *qalb*(heart), and *'aql*(Intellect). The analysis is mainly descriptive and does not compare the life circumstances of the two thinkers or the way practice and therapy differ in their end goals. It treats overlap at the level of structure, not at the level of the ecosystems that made those structures likely. My study extends this by pairing conceptual comparison with contextual comparison and by arguing that similar structures can arise without borrowing when different traditions face shared human problems.

Akber (2021) gives a close textual contrast between *nafs al-lawwāmah* and the superego and notes that Al-Ghazali's middle stage is a step on a spiritual path while Freud's superego

can be harsh and punitive. The article is strong on that single hinge point but does not build a full triadic, side-by-side account or connect the dots to the authors' social worlds. It also does not consider how Al-Ghazali's resignation from the Nizamiyya and retreat into Sufi practice, or Freud's atheism and clinical focus in Vienna, shaped their destinations. My study keeps Akber's sharp distinction and then widens the lens to a full three-level map supported by biography, setting, and aims.

Skinner (2018) notes partial alignments, such as libido with *nafs*, and stresses concepts absent in psychoanalysis, like *qalb*. The review maps terms but does not do a sustained Al-Ghazali–Freud comparison or weigh how atheism on Freud's side and spirituality on Al-Ghazali's side change the top level of the model. My study uses Skinner's insight about missing constructs to explain why Freud's top layer can feel punitive while Al-Ghazali's is tranquil, then shows how different starting points still yield a three-part structure.

## **LIMITATIONS**

One limitation of this study is that I have not read Al-Ghazali's works in Arabic or Freud's in German. Both authors wrote in their own languages, and while the English translations I used are reliable, some meaning may be lost in translation. For example, the Arabic word *nafs* can mean self, soul, or ego, and no single English word captures all those layers exactly. In the same way, Freud's German terms like *Es* (id) and *Über-Ich* (superego) carry shades of meaning that are not always reflected perfectly in English. For this paper I worked with translated excerpts that were most relevant, but I acknowledge that reading the originals might add further depth or nuance.

## **CONCLUSION**

Al-Ghazali and Freud lived in profoundly different intellectual universes: one shaped by revelation, Sufi practice, and the quest for divine certainty, the other by science, secularism, and the clinical attempt to explain neuroses. Yet both arrived at models of the self that are strikingly similar in structure. Each recognized a primal, desire-driven aspect of the human being; each described an intermediate stage of struggle and self-reproach; and each envisioned a higher level of conscience or peace. Their differences are equally instructive. For Freud, the superego was a human construction, often harsh and neurotic; for Al-

Ghazali, the tranquil self was harmony with God.

The practical implications of this comparison are clear. For psychology, it shows that spiritual traditions can add depth to our understanding of human motivation, inner conflict, and healing. This suggests that therapy does not have to ignore centuries of spiritual thought. For religious studies, it shows that ideas about the self can be compared with modern psychology in a way that allows both to keep their own strengths. In today's diverse world, the similarities between Al-Ghazali and Freud remind us that the struggle between desire and conscience is part of being human everywhere. By seeing both the shared structures and the different remedies they suggested, we gain a fuller understanding of the human mind. This understanding connects spiritual insight with psychological theory while respecting each tradition on its own terms.

Looking ahead, this comparison opens the door for more dialogue between faith and science. It also invites us to study other traditions with the same care, asking what they can teach us about the self. In the end, the models of Al-Ghazali and Freud both remind us that the search for balance between our lower desires and our higher calling is a lifelong journey, one that unites people across cultures and times.

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## EFFECT OF YOGA AND MEDITATION ON QUALITY OF LIFE AND ANXIETY AMONG ADOLESCENTS

**Kishor Ankulanekar**

Research Scholar

CHME Society's, Bhonsala Military College

Affiliated to Savitribai Phule Pune University

Pune (Maharashtra) India

**Dr. Dinesh Naik**

CHME Society's, Bhonsala Military College

Affiliated to Savitribai Phule Pune University

Pune (Maharashtra) India

### ABSTRACT

**Objective:** The Main Objective is to understand the predictors of quality of life and to find the effect of yoga and meditation on quality of life and anxiety among adolescents.

**Methods:** For the present study the researcher collected a total sample size of 60. The sample was collected from the colleges of Nashik district (Maharashtra, India). The sample age group is between 16 to 19 years old males and females. For the intervention purpose, the participants for the experiment were selected by using the randomized sampling technique. The data were collected before and after yoga and meditation intervention at the end of the month. A specific Yoga module was administered to the intervention program for 30 days.

**Results:** In our results, the P value of Quality of life among adolescents is 4.89 and it's significant at a 0.01 level of significance. And P value of Anxiety among adolescents is 3.73 and a P value is above the 0.01 level of significance which shows a significant difference between the pretest and post-test values of anxiety.

**Conclusion:** After this study, we conclude that one month's yoga and meditation practice significantly improvement in quality of life and it will positively effect on the quality of life among adolescents. Also, the result shows that one month of yoga and meditation practice significantly reduced anxiety in adolescents.

**Keywords:** Yoga and Meditation, Quality of Life, Anxiety,

### INTRODUCTION:

Yoga is an ancient Indian science and way of life that integrates physical postures, breathing

regulation, and meditation. Research indicates that regular yoga practice enhances concentration, information processing, learning, and memory. It unites the mind and body, aiming to control the modifications of the mind. Numerous studies with children and adults demonstrate that yoga practitioners often report deep relaxation, calmness, and happiness after sessions. Physiological benefits include improved muscular strength, flexibility, energy, range of motion, immune response, cardiovascular health, respiratory function, sleep quality, and hormonal balance (Monk-Turner & Turner, 2010).

Yoga contributes to the holistic development of an individual at multiple levels:

- **Physical level** – improves body efficiency by channeling energy in a controlled manner.
- **Mental level** – enhances imagination, creativity, and willpower.
- **Intellectual level** – sharpens concentration and cognitive development.
- **Emotional level** – refines and balances emotional sensitivity.

Thus, yoga supports physical, mental, intellectual, emotional, and spiritual growth, shaping well-rounded personality traits in students.

The practice has become increasingly popular in mainstream Indian culture in the past 15 years. As a mind–body discipline, yoga harmonizes physical, psychological, and emotional well-being. Studies confirm that regular yoga practice facilitates personal development, improves adjustment to the environment, and enhances overall quality of life (Schacter, Gilbert, & Wegner, 2009).

### **Quality of Life (QOL)**

According to *Britannica*, quality of life is the degree to which an individual is healthy, comfortable, and able to participate in or enjoy life. The *World Health Organization* (1993) defines QOL as a broad-ranging concept influenced by physical health, psychological well-being, social relationships, and environmental context. Importantly, QOL reflects an individual's perception of their position in life in relation to cultural values, goals, expectations, and concerns. It is not limited to health status or life satisfaction but emphasizes personal meaning and subjective experience.

### **Anxiety**

Anxiety is a basic human emotion characterized by fear, tension, uncertainty, and physiological arousal. It emerges when individuals perceive a situation as threatening to the

self or ego (Sarason, 1988). Anxiety can manifest through somatic, emotional, cognitive, and behavioral symptoms, producing uneasiness, worry, and dread (Bouras & Holt, 2007).

Spielberger and Vagg (1995) define anxiety as an emotional state of apprehension and tension that impacts the nervous system and may interfere with performance.

Research distinguishes between **trait anxiety** (a stable predisposition) and **state anxiety** (temporary responses to evaluative situations). Beck et al. proposed two dimensions:

- **Cognitive anxiety** – fearful thoughts and impaired cognitive functioning.
- **Somatic anxiety** – physiological arousal such as palpitations, sweating, or tension.

High anxiety levels are often linked with performance difficulties, mind-blocking, and excessive worry (Breuer, 1999; Callahan, 2001; Harris & Coy, 2003).

### **Yoga, Meditation, and Adolescence**

Adolescence is often described as a period of “storm and stress,” marked by emotional instability, rapid physical growth, and psychological challenges. Adolescents today face academic pressures, lifestyle imbalances, sleep deprivation, and heightened anxiety. During this developmental stage, yoga and meditation can serve as effective psychological interventions to improve well-being.

When practiced together, yoga and meditation strengthen the mind-body connection, promoting emotional balance, stress reduction, and improved quality of life. Multiple studies confirm their role in enhancing strength, flexibility, health, and emotional stability, while also reducing symptoms of stress, depression, and anxiety. Meditation in particular fosters deep relaxation and emotional resilience, contributing to a healthier and more fulfilling life. Yoga, rooted in ancient Indian wisdom, offers a comprehensive path for physical health, emotional stability, and spiritual growth. Quality of life, as understood by global health frameworks, involves both objective conditions and subjective perceptions. Anxiety, however, threatens this balance, especially during adolescence a stage of rapid growth and instability.

Integrating yoga and meditation into daily life can significantly reduce anxiety and enhance quality of life among adolescents. It equips them with tools for resilience, clarity, and self-control, enabling them to navigate challenges with balance and confidence. In an age marked by stress and uncertainty, yoga provides timeless wisdom for shaping healthier, happier, and more fulfilling human lives.

## LITERATURE REVIEW:

**Thimmapuram et al. (2022)** explored the differences in seven domains of health-related quality of life (HRQOL) including overall quality of life, stress management, workplace productivity, and health maintenance among participants of a 100-day yoga and meditation program organized by the Heartfulness Institute in collaboration with major yoga institutions in India. Using nonparametric tests such as the Mann-Whitney U and Kruskal-Wallis tests, the study found that experienced meditators reported significantly better outcomes across all HRQOL domains compared to non-practitioners and short-term practitioners. The findings indicate that long-term and consistent yoga and meditation practice are associated with enhanced HRQOL, particularly during stressful situations such as the COVID-19 pandemic.

**Pluto-Prądzyńska et al. (2022)** investigated the relationship between yoga, physical activity, and QOL among adults in Poland. In a cross-sectional survey of 714 participants, the researchers applied multivariate analyses to determine differences in QOL across groups. The results demonstrated that physically active individuals, particularly those practicing yoga, had significantly higher QOL compared to non-active groups. Moreover, yoga practice yielded higher QOL scores than other forms of physical activity, underscoring the combined physiological and psychological benefits of yoga.

**Sri Sri Ravi Shankar (2016)** emphasized the role of yoga, spirituality, and meditation in enhancing learning and coping abilities in modern educational contexts. The article highlights how ancient practices support concentration, reduce stress, and promote overall well-being for students navigating academic pressures.

**Das and Krishna (2020)** examined the effects of a one-month yoga module on anxiety and quality of life among 60 participants divided into control and experimental groups. Results indicated a significant reduction in anxiety levels ( $p < 0.01$ ) and an improvement in lifestyle and QOL for the experimental group, supporting yoga as an effective alternative intervention for psychological issues.

**Bazzano et al. (2022)** studied the effects of a school-based yoga and mindfulness program on anxiety and depression among adolescents aged 11–14 in an urban U.S. setting. Although reductions in anxiety and depression symptoms were not statistically significant between groups, the study found a significant time effect for anxiety reduction and a strong trend

toward improved depression outcomes. These findings suggest yoga and mindfulness programs hold promise as preventive strategies for youth mental health, with the need for larger-scale, long-term studies to establish effectiveness.

### **STATEMENT OF THE PROBLEM**

“To study the effect of yoga and meditation on quality of life and anxiety among adolescents”

### **OBJECTIVES OF THE STUDY**

1. To identify the predictors of quality of life.
2. To examine the impact of yoga and meditation interventions on physical health-related quality of life.
3. To assess the impact of yoga and meditation interventions on psychological health-related quality of life.
4. To evaluate the impact of yoga and meditation interventions on social relationship-related quality of life.
5. To analyze the impact of yoga and meditation interventions on environment-related quality of life.
6. To study the effect of yoga and meditation interventions on anxiety levels.

### **HYPOTHESES OF THE STUDY**

The following hypotheses were formulated incorporating the research evidence highlighting the physiological, psychological, and health benefits of yoga and meditation practices.

1. There will be a significant improvement in overall quality of life following yoga and meditation training.
2. There will be a significant improvement in physical health-related quality of life following yoga and meditation training.
3. There will be a significant improvement in psychological health-related quality of life following yoga and meditation training.

4. There will be a significant improvement in social relationship-related quality of life following yoga and meditation training.
5. There will be a significant improvement in environment-related quality of life following yoga and meditation training.
6. There will be a significant reduction in anxiety levels among adolescents following yoga and meditation training.

## **METHODOLOGY:**

The methodology consists of variables, sampling, research design, procedure, and statistical methods which will be used in the present study.

### **SAMPLE:**

For the present research, the researcher collected a total sample size of 60. The sample was collected from the colleges of Nashik district (Maharashtra, India). The sample age group is between 16 to 19 years old male and female. For the intervention purpose, the participants of the experimental group will be selected using the randomized sampling technique. While collecting the sample randomized sample technique will help the researcher to reach the exact sample which interested in taking part in the research.

The sample for the intervention will be selected using the following criteria inclusion and exclusion.

#### **Inclusion Criteria and Exclusion Criteria:**

##### **➤ Inclusion Criteria:**

1. Those between the ages of 16-20 years will select to be part of the study.
2. The sample includes only the unmarried subjects.
3. Only college students are part of the sample.
4. Both male and female students will be included in the study.
5. Those with only mild health conditions will be considered for the study.
6. Those who are willing to participate in the study will be included.

##### **➤ Exclusion Criteria:**

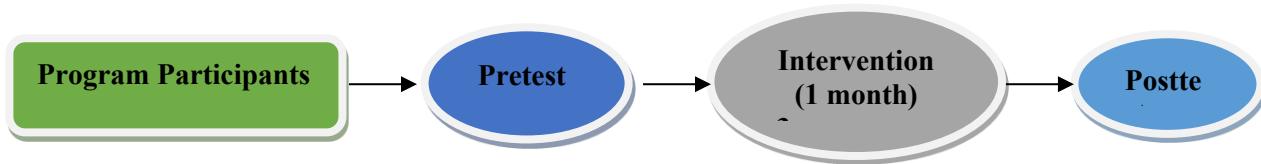
1. Subjects with acute health problems such as chronic physical issues or heart conditions will be excluded from the study.

2. Those subjects with severe psychiatric disorders will also not be included being part of the study.

### **RESEARCH DESIGN:**

In this study, the researcher will use the **peer learning approach**. In this researcher will train 2 students and the physical director of the college from the Nashik district and those trained yoga and meditation instructors will give the intervention program to the selected college student sample.

This study consists of a **Pretest – Posttest Single Group design**.



- X: Intervention Program (Yoga & Meditation)
- 1 M: Intervention period 01 month.

The researcher will select a sample of 60 students from the selected college from the Nashik district. The researcher will first administer the pretest on the sample then the researcher will conduct a yoga and meditation intervention program on the same group. After the 1-month intervention program, the researcher will conduct the post-test of quality of life and anxiety and observe the differences.

### **VARIABLES:**

- **Independent variable:**
  1. Yoga and Meditation (Physical postures, Dhyana, Relaxation techniques and breathing techniques)
- **Dependent variable:**
  1. Overall Quality of life
  2. Physical health-related quality of life
  3. Psychological quality of life
  4. Social relationship quality of life
  5. Environmental quality of life
  6. Anxiety
- **Control Variable:**

1. Age (16-19 yrs)
2. Gender (Male & Female)
3. Economic Status
4. Rural-urban status
5. Religion status

#### **TOOLS:**

##### **WHOQOL-BREF:**

WHO-QOL is developed by *the WHO* Quality of Life Group, (1993). The scale is designed to measure different types of Quality of life. It has 4 dimensions with good psychometric properties. This scale contains twenty-six (26) items with higher scores denoting higher quality of life. Each item is ranked on a point Likert scale. Dimensions of the test are, Physical (Pain, Energy, Sleep), Psychological (Positive and Negative feelings, Thinking, Self-esteem, Bodily image.), Social Relationships (Personal, Social support, Sexual Activity) and Environmental

##### **Beck Anxiety Inventory (BAI), (1993)**

The Beck Anxiety Inventory (BAI), developed by Aaron T. Beck and colleagues (1988), is a widely used self-report measure of anxiety. It consists of 21 multiple-choice items assessing common anxiety symptoms experienced over the past week. Each item is scored from 0 (not at all) to 3 (severely), with higher scores indicating greater anxiety severity. Standardized cutoffs classify anxiety as minimal (0–7), mild (8–15), moderate (16–25), or severe (26–63). The BAI demonstrates excellent reliability (Cronbach's  $\alpha = 0.92$ ; test-retest = 0.75) and good validity, showing moderate correlation with the Hamilton Anxiety Scale and mild correlation with depression measures.

#### **STATISTICAL ANALYSIS**

The data collected on the sample will be analyzed using SPSS version 21 and the following analysis will be carried out on the qualitative data: Descriptive statistics such as Mean, Standard deviation, and paired sample t-test used for analysis of data.

## RESULT AND DISCUSSION

**Table 1** shows the Mean, SD, and t-test scores of Quality of Life among adolescents.

| Variables | N  | Mean  | S.D   | t - value | Significance level        |
|-----------|----|-------|-------|-----------|---------------------------|
| Pretest   | 60 | 61.62 | 15.16 | 4.89      | Significant at 0.01 level |
| Posttest  | 60 | 72.43 | 16    |           |                           |

Table 1 shows that the mean of the Quality-of-Life pretest score of adolescents is 61.62 and S.D. is 15.16 and the Mean of Quality-of-Life Posttest score is 72.43 and S.D. is 16. And t value of Quality of Life among adolescents is 4.89. The t-value is significant at 0.01 levels. Therefore, the hypothesis there will be a significant improvement in overall Quality of Life after yoga and meditation training has been accepted.

**Table 2.** Showing the Mean, SD, and t-test score of Physical health-related Quality of Life among adolescents.

| Variables | N  | Mean  | S.D  | t - value | Significance level |
|-----------|----|-------|------|-----------|--------------------|
| Pretest   | 60 | 17.52 | 5.40 | 3.94      | *0.01              |
| Posttest  | 60 | 20.18 | 6.10 |           |                    |

Table 2 shows that the mean of the Physical health-related Quality of Life pretest score of adolescents is 17.52 and S.D. is 5.40 and the Mean of Quality of Life Posttest score is 20.18 and S.D. is 6.10. And t value of Quality of Life among adolescents is 3.94. The t-value is significant at 0.01 levels. Therefore, the hypothesis there will be a significant improvement in Physical health-related Quality of Life after yoga and meditation training has been accepted.

**Table 3** shows the Mean, SD, and t-test scores of Psychological Quality of Life among adolescents.

| Variables | N  | Mean  | S.D  | t - value | Significance level        |
|-----------|----|-------|------|-----------|---------------------------|
| Pretest   | 60 | 16.68 | 4.83 | 3.76      | Significant at 0.01 level |
| Posttest  | 60 | 19.38 | 5.70 |           |                           |

Table 3 shows that the mean Psychological Quality of Life pretest score of adolescents is 16.68 S.D. is 4.83 and Mean Quality of Life Posttest score 19.38 S.D. is 5.70 and the t value of Quality of Life among adolescents is 3.76. The t-value is significant at the 0.01 level. Therefore, the hypothesis there will be a significant improvement in Physical health-related Quality of Life after yoga and meditation training has been accepted.

**Table 4** shows the Mean, SD, and t-test scores of Social relationship-related Quality of Life among adolescents.

| Variables | N  | Mean | S.D  | t- value | Significance level        |
|-----------|----|------|------|----------|---------------------------|
| Pretest   | 60 | 6.60 | 8.93 | 2.01     | Significant at 0.05 level |
| Posttest  | 60 | 8.04 | 2.61 |          |                           |

Table 4 shows that the mean Social relationship-related Quality of Life pretest score of adolescents is 6.60 and S.D. is 8.93 and Mean Quality of Life Posttest score is 8.04 and the S.D. is 2.61 and the t value of Quality of Life among adolescents is 2.01. The t-value is significant at 0.05 levels. Therefore, the hypothesis there will be a significant improvement in Social relationships related to Quality of Life after yoga and meditation training has been accepted.

**Table 5** shows the Mean, SD, and t-test scores of environmental-related Quality of Life among adolescents.

| Variables | N  | Mean  | S.D  | t - value | Significance level            |
|-----------|----|-------|------|-----------|-------------------------------|
| Pretest   | 60 | 21.87 | 7.56 | 1.64      | Not significant at 0.05 level |
| Posttest  | 60 | 23.93 | 7.39 |           |                               |

Table 5 shows that the mean environmental Quality of Life pretest score of adolescents is 21.87 S.D. is 7.56 and Mean Quality of Life Posttest score is 23.93 and the S.D. is 7.39 And t value of environmental Quality of Life among adolescents is 1.64. The t-value is not significant at 0.05 levels. Therefore, the hypothesis there will be a significant improvement in environmental-related Quality of Life after yoga and meditation training has been rejected.

**Table 6** shows the Mean, SD, and t-test scores of Anxiety among adolescents.

| Variables | N  | Mean  | S.D  | t - value | Significance level |
|-----------|----|-------|------|-----------|--------------------|
| Pretest   | 60 | 17.92 | 3.75 |           |                    |
| Posttest  | 60 | 14.77 | 5.25 | 3.73      | *0.01              |

Table 6 shows that the mean Anxiety pretest score of adolescents is 17.92 S.D. is 3.75 and Mean Anxiety Posttest score is 14.77 and S.D. is 5.25 and the t-value of Anxiety among adolescents is 3.73. The t-value is above the 0.01 level. Therefore, the hypothesis there will be a significant improvement in anxiety among adolescents after yoga and meditation training has been accepted.

## DISCUSSION

The hypothesis that there would be a significant improvement in the overall quality of life after yoga and meditation training was rejected. The findings suggest that one month of yoga and meditation practice did not produce a statistically significant improvement in overall quality of life. However, the mean values indicated a positive trend, implying that a longer duration of yoga and meditation practice may lead to significant improvements in adolescents' quality of life. Similarly, no significant improvements were observed in the psychological, social relationship, and environmental dimensions of quality of life. Yet, mean values again showed positive changes, suggesting that extended practice could yield meaningful benefits in these areas.

The hypothesis that yoga and meditation training would significantly improve physical health-related quality of life was accepted. Consistent with previous research, the results confirm that even a one-month yoga and meditation program positively impacts physical well-being.

## CONCLUSION

Yoga and meditation positively affect on quality of life and anxiety among adolescents. The result shows that yoga and meditation differentiate between pretest and post-test quality of

life and anxiety among adolescents. Daily yoga and meditation practice is beneficial to the good life.

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## “EMOTIONAL EXHAUSTION AND COGNITIVE INFLEXIBILITY AS PROSPECTIVE PREDICTORS OF SUICIDAL IDEATION AMONG COLLEGE STUDENTS IN MUMBAI

**Sneha Singh**

Department of Psychology,

Guru Nanak College, Mumbai Maharashtra

**Nisar Saiyed**

Research Scholar

Mumbai Maharashtra

### ABSTRACT

Suicidal ideation among college students is often linked to emotional exhaustion from academic and social pressure and cognitive inflexibility, which impairs adaptive coping and problem-solving abilities. The present research explored the predictive relationship between emotional exhaustion, cognitive inflexibility and suicidal ideation among college students in Mumbai. 130 participants (95 Females, 35 Males), aged between 18-25 years ( $M=20.58$ ,  $SD=2.01$ ), were selected using convenience sampling. All participants completed the Emotional Exhaustion Scale (Ramos et al., 2005), Cognitive Flexibility Inventory (Dennis & Vander Wal, 2010) and Suicidal Ideation Attributes Scale (Van Spijker et al., 2014). Findings of the study indicated that emotional exhaustion showed an insignificant positive correlation with suicidal ideation ( $p > .05$ ) and hence was not a statistically significant predictor. Furthermore, cognitive inflexibility was strongly correlated with suicidal ideation and was found to be a statistically significant predictor ( $p < .001$ ) of suicidal ideation. These results highlight the role of cognitive inflexibility in increasing vulnerability to suicidal ideation, while suggesting that the role of emotional exhaustion may require further investigation in more diverse and larger samples. Future research can focus on understanding the role of hopelessness and stress and how it influences the relationship between emotional exhaustion, cognitive inflexibility and suicidal ideation.

**Keywords:** Emotional Exhaustion, Cognitive Inflexibility, Suicidal Ideation, College Students.

## INTRODUCTION

College life is a period of great transition characterized by academic pressures, financial strain and uncertainty about future career paths. For many college students, these stressors cooccur with challenges of emerging young adulthood evoking feelings of uncertainty, self-doubt and isolation which combined with inadequate and maladaptive coping may heighten the vulnerability to mental health concerns. Environmental stressors combined with predisposition to experience mental health problems may heighten the increase risk for suicide. According to the National Crime Records Bureau (NCRB), 13,089 students died due to suicide in India in 2021. There has been 70% increase in the student suicide rate compared to last decade (Rath et al., 2025). This alarming surge highlights the increasing vulnerability of students to suicidal behavior.

The world's most suicide accounts from highly populated countries namely India and China, however there is relatively limited research on these populations. World Health Organization (WHO)'s findings of World Mental Health Surveys, conducted in 17 countries, indicated that the risk of first onset of suicide ideation significantly increases during adolescence and adulthood and stabilizes in early midlife (Nath et al., 2012). Some risk factors linked to suicide among emerging young adults include poor self-esteem, hopelessness, depression, diminished academic performance, and witnessed suicide in family or peers.

Emotional exhaustion is prolonged feelings of fatigue, emotional depletion, and difficulty handling situations, and has a potential ability to degrade an individual's ability to bounce back. In college going students, academic pressure, interpersonal difficulties and performance anxiety can result in an overwhelming and emotionally draining state. Hopelessness and perceived burdensomeness due to constant exposure to stressful situations are key psychological factors leading to suicidal ideation. The perceived inability to manage daily demands due to lack of emotional energy, lead to cognitive distortion and they may view suicide as an escape from stressful situation, especially prominent in case of no social support. Cognitive inflexibility is rigid thinking patterns and difficulty obtaining alternatives options or solutions, is also associated with suicidal ideation because young adults especially students with a stringent mindset struggle

viewing situations from multiple perspectives, or anticipate positive future possibilities. Consequently, suicide emerges as the possible resolution, due to inflexible approach towards life.

## REVIEW OF RELATED LITERATURE

Emotional exhaustion is a significant factor recognized as a condition predicting suicidal ideation. **Aquino-Canchari et al. (2025)** researched medical students in Peru and found significant association between emotional exhaustion and suicidal ideation but not with the self-harm tendencies. **Benson et al. (2025)** explored psychological factors associated with emotional exhaustion, the result of the study indicated that emotional exhaustion was associated with self-worth and lack of trust in others. **Olson et al. (2025)** studied stress, burnout and engagement among students, the findings of research suggest subject specific differences in stress burnout patterns. **Edwards et al. (2020)** reported that greater levels of emotional exhaustion is significantly associated with increased suicidal ideation. **Huang et al. (2020)** found that emotional exhaustion has notable relationship with suicidal ideation among healthcare workers, relationship mediated by hopelessness and depression. **Stehman et al. (2019)** investigated etiologies and consequences of emotional exhaustion, findings revealed strong relationship with depression, substance abuse and suicidal ideation. The relationship between cognitive inflexibility and suicidal ideation has been highlighted in many studies. **Navya et al. (2023)** in Jharkhand reported that depression with suicidal ideation was strongly linked to higher metacognition, rumination, executive deficits and lower cognitive flexibility. **Cheek et al. (2023)** found stronger association between cognitive inflexibility and suicidal ideation among youth experiencing high chronic stress. **Chng et al. (2022)** found that perfectionism positively predicted suicidal ideation while cognitive flexibility predicted lower levels of suicidal ideation. **Novak et al. (2022)** found that higher baseline cognitive inflexibility was significant predictor of worst point suicidal ideation at 3 months follow-up among psychiatric patients hospitalized for suicide risk, although it was not a significant predictor of hopelessness. **Miranda et al. (2013)** in a 2–3-year follow-up study found that baseline cognitive inflexibility significantly predicted suicidal ideation in the future where the relationship was directly mediated by brooding and indirectly by

hopelessness. While extensive literature has demonstrated the relationship between emotional exhaustion, cognitive inflexibility and suicidal ideation, many of the evidence comes from specific population like psychiatric patients or suicide attempters. Findings about whether emotional exhaustion and cognitive inflexibility predicts suicidal ideation in broader settings are limited. Furthermore, most of the studies are conducted in western context, limiting understanding of these variables in diverse culture and socio-economic settings, especially in Indian context. The present research addresses the gaps by using an integrated model consisting of cognitive inflexibility and emotional exhaustion among college students in Mumbai.

### **STATEMENT OF THE PROBLEM**

The proposed research aims to investigate the predictive relationship between emotional exhaustion, cognitive inflexibility and suicidal ideation among college students in Mumbai.

### **OBJECTIVES OF THE STUDY**

1. To study if emotional exhaustion is a significant predictor of suicidal ideation among college students.
2. To investigate if cognitive inflexibility is a significant predictor of suicidal ideation among college students.

### **HYPOTHESES OF THE STUDY**

1. H1. Emotional Exhaustion will be a significant predictor of Suicidal Ideation among college students.
2. H2. Cognitive Inflexibility will be a significant predictor of Suicidal Ideation among college students.

## **METHODOLOGY**

### **SAMPLE**

The total number of individuals participating in the study were 150. Out of which 130 (95 Females, 35 Males) were selected for the final sample. All participants were college going students pursuing higher education and residing in Mumbai. The age range of the sample was

18 to 25 years ( $M=20.58$ ,  $SD=2.01$ ). Participants were selected through convenience sampling.

### **RESEARCH DESIGN**

Correlational research design was employed. The quantitative data was collected through a survey method using online questionnaires.

### **VARIABLES USED IN THE STUDY**

- Independent Variables:** (1) Emotional Exhaustion and (2) Cognitive Inflexibility
- Dependent Variable:** Suicidal Ideation

### **OPERATIONAL DEFINITIONS**

#### **1. Emotional Exhaustion**

Emotional exhaustion is characterized as a prolonged state of mental and physical depletion, as a result of long working hours or personal commitments/demands and exposure to stressful environment (Wright & Cropanzano, 1998). In the present study, the emotional exhaustion variable is operationally defined as a score obtained on Emotional Exhaustion Scale (ECE). The ranges of the scale are interpreted as low 10-19 points, medium 20-29 points, high 30-39 points, and very high 40-50 points.

#### **2. Cognitive Inflexibility**

Cognitive inflexibility is defined as rigid thinking patterns /inability to shift between modes of thinking, leading to difficulty adjusting to changing situations (Cools & Robbins, 2004). In this study, cognitive inflexibility is operationally defined as a score obtained on Cognitive Flexibility Inventory (CFI). Higher total scores indicate greater cognitive flexibility, whereas lower scores on scale reflect greater cognitive inflexibility.

#### **3. Suicidal Ideation**

Suicidal ideation is commonly known as suicidal thought, defined as unusual preoccupation

with severe thoughts about ending one's life (Gliatto & Rai, 1999). In the current study, Suicidal ideation is operationally defined as scores obtained on the Suicidal Ideation Attributes Scale (SIDAS). The higher obtained score reflects severity of suicidal ideation and lower scores suggest minimal suicidal ideation.

### **RESEARCH TOOLS**

#### **Emotional Exhaustion Scale ( Martínez-Líbano et al., 2023)**

Emotional Exhaustion was measured using Emotional Exhaustion Scale (ECE). The ECE was published by Martínez-Líbano et al., in 2022. The ECE consists of 10 items, the responses marked on 5- point likert scale ranging from 1 (Rarely) to 5 (Always). The ranges of scale include low 10-19 points, medium 20-29 points, high 30-39 points, and very high 40-50 points. The scale is available in the public domain and was validated on Portuguese University Students. The scale includes good internal consistency with Cronbach's Alpha of (- 0.88). It also has strong Test-retest reliability (0.82). Findings from factor analysis, Bartlett's Test of Sphericity (  $p < 0.001$ , KMO = 0.86) suggest adequate sample (Ala et al., 2024).

#### **Cognitive Flexibility Inventory (Dennis et al., 2010)**

The Cognitive Flexibility Inventory (CFI) was employed in the study to assess cognitive inflexibility scale. The inventory is composed of 20-items, responses are rated on a 7 point Likert scale ranging from 1 = Strongly Disagree to 7 = Strongly Agree. The test was published in 2010 by Dennis et al. The scale was not available in public domain and hence permission was sought to use it. Scoring employs summation, with the lower total scores reflecting greater levels of cognitive inflexibility, whereas greater scores suggest higher cognitive flexibility. The scale employs reverse scoring for some items. The Cronbach's alpha ranged from acceptable to satisfactory for CFI and its two sub scales. The Test - Retest Reliability for CFI total ( $r = .81$ ) was found to be high. The convergent construct validity ranged from moderate to high positive correlations (Dennis et al., 2010).

#### **Suicidal Ideation Attributes Scale (Van Spijker et al., 2014)**

The SIDAS, published by Van Spijker et al. in 2014, is used to measure the presence and severity levels of suicidal ideation over the past month. The scale include 5 dimensions namely- frequency of suicidal thoughts, controllability of thoughts, closeness to a suicide

attempt, distress caused by thoughts, and interference with daily functioning. The responses of participants are rated on 11 point Likert scale, ranging from 0 (Never) to 10 (Always), the total score ranges from 0 to 50, and also include reverse scoring. The total lower score on scale suggests absence or minimal suicidal ideation, while higher score obtained indicates higher levels of suicidal ideation. The scale has been found to have a high internal consistency (Cronbach alpha = 0.91) and good convergent validity with the Columbia-Suicide Severity Rating Scale, Patient Health Questionnaire 9 ( $r=0.65$ ), General Anxiety Disorder 7 ( $r=0.58$ ), and Insomnia Severity Index ( $r=0.40$ ) (Van Spijker et al., 2014).

## **PROCEDURE**

Convenience sampling technique was employed with the help of google forms to collect responses from college students. Online method of data collection was used to collect these responses. The questionnaire started with an introductory message explaining the essential information about the study, assuring confidentiality and obtaining informed consent which was followed by demographic questions, Emotional Exhaustion Scale (Ramos et al., 2005),

Cognitive Flexibility Inventory (Dennis & Vander Wal, 2010) and Suicidal Ideation Attributes Scale (Van Spijker et al., 2014) along post task questions to gather contextual information about potential confounding variables. After the completion of the survey, the participants were thanked for participation and received a brief debriefing outlining study's variables and purpose. The data obtained was analysed using correlation and simple linear regression independently for emotional exhaustion with suicidal ideation and cognitive inflexibility with suicidal ideation. All ethical considerations were followed throughout the research.

## **RESULTS**

The purpose of the study was to investigate Emotional Exhaustion and Cognitive Inflexibility as prospective predictors of Suicidal Ideation among college students in Mumbai. Out of 150 college students who filled the form, 130 passed the inclusion and exclusion criteria. Therefore, the final sample size was 130. The data was collected using

convenience sampling. Statistical analysis of the data was completed using Microsoft Excel and JASP software version 0.17.1. The descriptive statistics were computed for all the three variables and age. Inferential statistics used were Pearson's Product-Moment correlation and Simple Linear Regression for the variables.

The hypotheses proposed in the current study were: Emotional Exhaustion will be a significant predictor of Suicidal Ideation among college students. Cognitive Inflexibility will be a significant predictor of Suicidal Ideation among college students. The descriptive statistics calculated are presented in the table below.

**Table 1. Descriptive statistics for the variables**

| <b>Variables</b> | <b>Statistics</b> |             |           |              |            |            |
|------------------|-------------------|-------------|-----------|--------------|------------|------------|
|                  | <b>N</b>          | <b>Mean</b> | <b>SD</b> | <b>Range</b> | <b>Min</b> | <b>Max</b> |
| <b>EE</b>        | 130               | 31.18       | 8.037     | 35           | 10         | 45         |
| <b>CI</b>        | 130               | 66.62       | 15.132    | 80           | 24         | 104        |
| <b>SI</b>        | 130               | 10.42       | 9.023     | 43           | 0          | 43         |

*Note:* EE = Emotional Exhaustion, CI = Cognitive Inflexibility, SI = Suicidal Ideation. As indicated in Table 1, the descriptive statistics of range, mean, and standard deviation values were obtained from a sample of 130 participants with a mean age of 20.58, and SD of

2.01. The mean of Emotional Exhaustion was found to be 31.18, for Cognitive Inflexibility was 66.62 and, 10.42 for Suicidal Ideation. The standard deviation values of EE, CI and SI were 8.037, 15.132 and 9.023 respectively. The range of scores obtained for Emotional Exhaustion was 35 (maximum value being 45, and minimum being 10). The range for Cognitive Inflexibility was 80 (maximum value being 104, and minimum being 24). The range for Suicidal Ideation was 43 (maximum value being 43, and

minimum being 0).

**Table 2. Pearson Product Moment Correlation Coefficient between the variables (N=130)**

| Variables                      | Emotional Exhaustion | Cognitive Inflexibility | Suicidal Ideation |
|--------------------------------|----------------------|-------------------------|-------------------|
| <b>Emotional Exhaustion</b>    | -                    | -                       | -                 |
| <b>Cognitive Inflexibility</b> | -0.053               | -                       | -                 |
| <b>Suicidal Ideation</b>       | 0.119                | 0.249**                 | -                 |

*Note:* Pearson's Correlation is significant at the \* $p < .05$ , \*\*  $p < .01$  and \*\*\*  $p < .001$ .

Above table 2 represents the values obtained after computing correlation. The correlation between suicidal ideation and emotional exhaustion is a positive correlation, indicating higher levels of emotional exhaustion will be associated with higher levels of suicidal ideation, although the relationship is weak and not significant. The value obtained ( $r = 0.119, p > .05$ ), indicates a weak positive correlation. The correlation between suicidal ideation and cognitive inflexibility was found to be a positive correlation. The value obtained ( $r = 0.249, p < .01$ ) indicates a strong correlation. This denotes that when higher levels of cognitive inflexibility is associated with higher levels of suicidal ideation. Therefore, based on descriptive statistics and correlational analysis, further regression among cognitive inflexibility and suicidal ideation under the study was calculated using simple linear regression. Regression analysis was not calculated for emotional exhaustion and suicidal ideation because of absence of statistically significant relationship between the variables.

**Table 3.1. Model Summary table for Cognitive Inflexibility predicting Suicidal Ideation**

| Model          | R     | R <sup>2</sup> | Adjusted R <sup>2</sup> | RMSE  | R <sup>2</sup> Change | F Change | df1 | df2 | p    |
|----------------|-------|----------------|-------------------------|-------|-----------------------|----------|-----|-----|------|
| H <sub>0</sub> | 0     | 0              | 0                       | 9.023 | 0                     | -        | 0   | 129 | -    |
| H <sub>1</sub> | 0.249 | 0.062          | 0.055                   | 8.774 | 0.062                 | 8.440    | 1   | 128 | .004 |

*Note:* Dependent Variable: Suicidal Ideation ; Predictor: Cognitive Inflexibility

The table 3.1 describe the model summary of Cognitive Inflexibility predicting Suicidal Ideation. The adjusted R<sup>2</sup> value is 0.055, with 6.2% of the variance is explained by suicidal ideation in Cognitive inflexibility. The RMSE value in the null hypothesis is 9.023 and decreased in the alternative hypothesis ( 8.774 ), depicting prediction accuracy. The R<sup>2</sup> change = 0.062, F = 8.440; p = .004, indicates that Cognitive Inflexibility significantly predicts Suicidal ideation. The p value is less than 0.05 threshold.

**Table 3.2. ANOVA Table for Cognitive Inflexibility predicting Suicidal Ideation**

| Model          |            | Sum of Squares | df  | Mean Square | F     | p    |
|----------------|------------|----------------|-----|-------------|-------|------|
| H <sub>1</sub> | Regression | 649.7          | 1   | 649.74      | 8.440 | .004 |
|                | Residual   | 9,853.8        | 128 | 76.98       |       |      |
|                | Total      | 10,503.6       | 129 |             |       |      |

*Note:* Dependent Variable: Suicidal Ideation ; Predictor: Cognitive Inflexibility

Table 3.2 represents, ANOVA Table for Cognitive Inflexibility predicting Suicidal Ideation. The regression model explains the sum of squares to be 649.74, with 1 degree of freedom and residual sum of squares was 9,853.8 with 128 degree of freedom. The F = 8.440; p = .004, signifies that Cognitive Inflexibility significantly predicts Suicidal Ideation

( $p < .001$ )

**Table 3.3. Coefficients Table for Cognitive Inflexibility predicting Suicidal Ideation**

| Model  | Unstandardized          |        | Standard Error | Standardized | t      | p      |
|--|-------------------------|--------|----------------|--------------|--------|--------|
| $H_0$  | (Intercept)             | 10.415 | 0.791          |              | 13.161 | < .001 |
| $H_1$  | (Intercept)             | 0.535  | 3.487          |              | 0.154  | .878   |
|  | Cognitive Inflexibility | 0.148  | 0.051          | 0.249        | 2.905  | .004   |
| <i>Note:</i> Dependent Variable: Suicidal Ideation; Predictor: Cognitive Inflexibility |                         |        |                |              |        |        |

The above table 3.3 signifies the Regression Coefficients for Cognitive Inflexibility predicting Suicidal Ideation. The unstandardized coefficient ( $\beta = 0.148$ ) for the predictor variable (Cognitive Inflexibility) and standardized coefficient ( $\beta = 0.249$ ) for Cognitive inflexibility was found to be statistically significant with Suicidal Ideation  $t (128) = 2.905$  ;  $p = .004$ . This explains that for every one unit increase in Cognitive Inflexibility, there is expected average increase by 0.148 units,

## DISCUSSION

The aim of the current study is to investigate the predictive relationship between Emotional Exhaustion, Cognitive Inflexibility and Suicidal Ideation among college students. Hence, correlation and regression analysis was conducted with three variables. The results obtained will help in understanding the contributors of suicidal ideation in college students and help in developing interventions for the same.

The first hypothesis of the study was that Emotional Exhaustion will be a significant predictor of Suicidal Ideation among college students. The result for Correlation analysis was found to be weak and insignificant positive correlation ( $r = 0.119$ ,  $p > .05$ ). As a result, regression analysis was not computed between Emotional Exhaustion and Suicidal Ideation. Hence, results were not in line with the second hypothesis of the study.

The insignificant result can be explained by Interpersonal theory of Suicide (Van Orden et al.,

2010). This theory states that resources (Social Support, Coping, resilience, meaning in life) can alleviate the influence of Emotional Exhaustion on Suicidal Ideation. As a result, the association between Emotional Exhaustion and Suicidal ideation shrink to non-significance. Many models explain, Emotional Exhaustion elevates depressive symptoms and hopelessness, which leads to Suicidal Ideation. When there is low significant association, there is disappearance of direct path from Emotional Exhaustion → Suicidal Ideation which aligns with Beck's Cognitive model (Beck et al., 1985).

These results are similar to the study conducted by Menon et al. (2020). The study explored the association between burnout and Suicidal Ideation after adjusting for depression and the association of burnout and depression with self-reported medical errors. In a cross-sectional design, using a convenience sample of more than 1200 physicians. The results in association to Beck's model of cognitive development, suggest that depression is directly linked to Suicidal Ideation but not burnout.

Another study explored association between academic stress and suicidal ideation, where coping style and resilience acted as a moderator. The sample consisted of 505 participants and the findings indicate effects of moderating variables, that high coping skills, resilience buffer the association between Stress and Suicidal Ideation. Thus, an insignificant relationship can be attributed to strong coping skills (Okechukwu, et al., 2020).

The findings of present study may also be explained by background and protective factors evident in the study sample. More than half of the sample belonged to a psychology background, suggesting greater awareness and use of effective coping mechanisms. This understanding reduces the likelihood of a direct significant association. The post task questions revealed that 36 participants reported having no close friends, while others reported the presence of strong social support. Consistent with prior research and theories, perceived social support mitigates the risk of Suicidal thoughts, even under stressful and emotionally exhausting situation.

The second hypothesis of the study was that cognitive inflexibility will be a significant predictor of suicidal ideation among college students. Correlation analysis showed that suicidal ideation and cognitive inflexibility has a positive correlation. The value obtained is ( $r = 0.24$ ,  $p < .001$ ) which is a strong positive correlation. The results of simple linear regression showed that cognitive inflexibility was found to be a significant predictor of suicidal ideation ( $p < .001$ ) and the results were in line with the second hypothesis of the study.

These findings were consistent with the study done by Miranda et al. in a 2-3 year follow-up study found that baseline cognitive inflexibility significantly predicted suicidal ideation in the future where the relationship was directly mediated by brooding and indirectly by hopelessness among young adults aged between 18 to 22 years (Miranda et al. , 2013) Additionally, in another study, Miranda et al. (2012) reported that cognitive inflexibility predicted suicidal ideation in prospective over 6 months among suicide attempters compared to no attempters even after controlling presence of baseline mood or anxiety diagnosis, hopelessness and baseline ideation.

Cognitive inflexibility may contribute to suicidal ideation by strengthening maladaptive patterns such as rumination which is repetitive and rigid focus on distress, research has rumination linked with higher levels of suicidal thoughts over time (Miranda et al., 2012) Furthermore, cognitive inflexibility can also impair problem-solving abilities which may make it harder for individuals to cope with life stressors. This inability to generate adaptive solutions may result into reinforcement of feelings of hopelessness which in turn increases vulnerability to suicidal ideation. The obtained results also align with the diathesis-stress-hopelessness model of suicidality given by Schotte & Clum (1982).

problem-solving abilities is a key pathway through which cognitive inflexibility fosters hopelessness which exacerbates the risk of suicidal ideation. The model emphasizes that not it is not stress alone but the interaction between cognitive vulnerability (cognitive inflexibility), hopelessness and stress that leads to suicidal thinking.

## **CONCLUSION**

The primary aim of the current study was to investigate the predictive relationship between Emotional Exhaustion, Cognitive Inflexibility and Suicidal Ideation among college students. Findings of the study indicated that emotional exhaustion as measured by Emotional Exhaustion Scale (Ramos et al., 2005) showed an insignificant positive correlation with suicidal ideation ( $p > .05$ ) assessed using Suicidal Ideation Attributes Scale (Van Spijker et al., 2014) and hence was not a statistically significant predictor. Furthermore, cognitive inflexibility as measured by Cognitive Flexibility Inventory (Dennis & Vander Wal, 2010) was strongly correlated with suicidal ideation and was found to be a statistically significant predictor ( $p < .001$ ) of suicidal ideation.

The study had certain limitations. The study sample consisted of a higher proportion of female participants, limiting generalizability across genders. Furthermore, most students were from the

psychology background who have prior knowledge of emotion regulation and coping mechanisms. Lastly, the current study employed online self-report measures, where factors like faking responses, social desirability, and the external environment of the participant could not be controlled for.

The study has implications for psychologists, therapists, academic institutions, and the policy makers. The findings indicate that cognitive inflexibility is a statistically significant predictor of suicidal ideation, thus highlighting the importance of early screening and intervention programs in educational and clinical settings. Mental health professionals also can incorporate cognitive flexibility training such as problem-solving strategies, and resilience-building interventions to reduce the risk among students. Since the findings indicate a weak, non-significant relationship between emotional exhaustion and suicidal ideation, interventions may address academic stress and burnout as contributory factors. NGOs can conduct workshops and provide resources that encourage stress management and adaptive coping among students. Policy makers may use these findings to create policies aiming to enhance access to student mental health services.

The current study focused on college students; therefore, future research can include more diverse samples for better generalization of the findings. Incorporating mixed-method approaches such as including qualitative interviews, may provide better insights into the understanding of suicidal ideation. Further studies can also investigate why emotional exhaustion was not a significant predictor of suicidal ideation in this sample. Lastly, future research can also focus on understanding the role of hopelessness and stress in influencing the relationship between emotional exhaustion, cognitive inflexibility, and suicidal ideation.

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## **Mind traps in the Boardroom: Unraveling Cognitive Biases in Managerial Decision**

**Making Amid complexity**

**Devanayaki Ragunthan**

Department of Psychology,

PSG College of arts and science, Coimbatore, Tamil Nadu

### **ABSTRACT**

In today's high-pressure organizational environments, decision-making has become increasingly complex and vulnerable to cognitive biases. This chapter explores the phenomenon of "mind traps" in the boardroom systematic cognitive distortions that impair managerial judgment amid complexity. Drawing from cognitive psychology and management science, the chapter examines how biases such as confirmation bias, overconfidence, and anchoring influence strategic decisions. Through real-world case studies and psychological insights, it highlights the consequences of biased thinking and offers practical tools for bias-aware leadership. The proposed Bias-Aware Leadership Model (BALM) provides a structured approach to improving decision quality in volatile, uncertain, complex, and ambiguous (VUCA) contexts.

**Keywords:** Cognitive biases, Decision Making, Organizational environment, behavioral strategy, and complexity.

### **1. INTRODUCTION**

In today's volatile, uncertain, complex, and ambiguous (VUCA) world, organizational leaders are constantly required to make critical decisions under intense pressure (Snowden & Boone, 2007). Whether navigating global disruptions, managing resource scarcity, or balancing innovation with risk, decision-makers face unprecedented cognitive and emotional demands. Yet, despite access to advanced data analytics and strategic planning tools, many leaders continue to fall prey to

irrational judgments and suboptimal choices (Kahneman, 2011). This paradox often lies not in a lack of information but in the human mind's inherent limitations, particularly cognitive biases.

Cognitive biases refer to systematic patterns of deviation from rationality in judgment, which occur due to the brain's attempt to simplify information processing. These biases are not mere occasional mistakes; they are predictable mental shortcuts that subtly but powerfully influence how managers perceive problems, evaluate options, and select courses of action (Tversky & Kahneman, 1974). While these heuristics are useful in everyday life, they can lead to significant errors when applied to complex, high-stakes decision-making in managerial settings.

In the context of organizational complexity marked by dynamic systems, nonlinear interactions, and unpredictable feedback loops the effects of cognitive biases are magnified. Leaders may become overconfident in their forecasts, anchor decisions on irrelevant data, or ignore dissenting opinions due to confirmation bias (Kahneman, 2011; Nickerson, 1998). These "mind traps" can undermine the strategic agility of organizations, misallocate resources, and erode stakeholder trust. Recognizing and addressing these biases, therefore, is not just a psychological concern but a vital component of effective management (Bazerman & Tenbrunsel, 2011).

This chapter seeks to bridge the disciplines of cognitive psychology and management science to explore how cognitive biases manifest in complex organizational environments. By integrating theoretical insights with real-world case studies, it aims to reveal the often-invisible psychological forces that shape managerial thinking. Furthermore, the chapter provides practical tools and strategies that leaders can adopt to reduce the influence of biases and enhance the quality of their decisions.

The discussion begins with a foundational understanding of cognitive biases and their psychological roots. It then explores how complexity amplifies these biases in leadership contexts, followed by illustrative cases that highlight the consequences of unexamined mental shortcuts. Finally, the chapter offers a set of evidence-based techniques for developing bias-aware leadership, enabling managers to lead with greater clarity, flexibility, and self-awareness.

In an age where complexity is the new normal, understanding the psychological undercurrents of decision-making is more essential than ever. The future of organizational leadership may well depend on a leader's ability to not only master data and strategy but also to

navigate the intricate terrain of their own mind.

## 2. Understanding Cognitive Biases

Decision-making is central to leadership and management, yet it is rarely as rational and objective as classical models suggest. In reality, individuals rely on mental shortcuts known as heuristics, fast, intuitive processes that simplify decision-making under uncertainty (Tversky & Kahneman, 1974). While often efficient, these heuristics can give rise to cognitive biases, systematic deviations from rational judgment that distort perception, interpretation, and response.

Cognitive biases emerge from the dual-process theory of thinking, which proposes two distinct modes of cognition: System 1, which is fast, intuitive, and emotionally charged; and System 2, which is slow, analytical, and deliberate (Kahneman, 2011). System 1 dominates under time pressure or cognitive overload, common conditions in complex managerial environments, resulting in biased decisions that feel confident but may be flawed.

Several well-documented cognitive biases frequently affect managerial decision-making:

**2.1 Confirmation Bias:** The tendency to seek, interpret, and remember information that confirms pre-existing beliefs, while disregarding contradictory evidence (Nickerson, 1998). For example, a leader may selectively interpret market data to support a favored investment strategy.

**2.2 Anchoring Bias:** The tendency to rely too heavily on the first piece of information encountered (the "anchor") when making decisions, even if it is irrelevant or arbitrary (Tversky & Kahneman, 1974). In negotiations or budget planning, initial figures can skew subsequent estimates.

**2.3 Overconfidence Bias:** The overestimation of one's knowledge, predictions, or control over outcomes. This is particularly common among executives and entrepreneurs and can lead to underestimation of risks or inflated forecasting (Moore & Healy, 2008).

**2.4 Framing Effect:** The way a problem or choice is presented (framed) influences decision outcomes, even when the underlying information remains constant (Kahneman & Tversky, 1981). A leader may make a different choice when a proposal is framed as a "gain" rather than a "loss," despite identical outcomes.

**2.5 Availability Heuristic:** Judging the frequency or likelihood of events based on how easily

examples come to mind (Tversky & Kahneman, 1973). This can lead to risk overestimation after a recent crisis or underestimation of rare but impactful threats.

**2.6 Loss Aversion:** The tendency to prefer avoiding losses over acquiring equivalent gains, often leading to overly conservative or status quo decisions (Kahneman & Tversky, 1979). This bias may prevent innovation or necessary change in organizations.

These biases are not signs of incompetence but rather reflections of the human brain's adaptive mechanisms. In everyday life, they allow for rapid decisions with minimal cognitive effort. However, in the complex, high-stakes realm of organizational leadership, these shortcuts can have serious consequences, especially when decisions impact large systems, diverse stakeholders, and long-term outcomes.

Understanding these biases is the first step toward managing them. While they cannot be entirely eliminated, their influence can be mitigated through awareness, structured decision-making processes, and organizational practices that encourage diverse perspectives and reflective thinking. The next section explores how such biases are amplified in complex environments and why traditional management models often fail to account for these psychological variables.

### **3. Complexity and Managerial Decision-Making**

Organizations today operate in environments characterized by constant change, global interdependencies, rapid technological advances, and increasingly diverse stakeholder expectations. This phenomenon is captured by the concept of complexity, which refers to systems with multiple interacting elements, feedback loops, nonlinearity, and emergent behaviors (Snowden & Boone, 2007). In such systems, small changes can have disproportionate effects, and outcomes are often unpredictable.

From a cognitive psychology perspective, complexity places a significant burden on the human decision-making apparatus. Leaders must make choices based on incomplete, ambiguous, or even contradictory information, often under conditions of time pressure, emotional stress, and accountability. In such high-demand scenarios, reliance on heuristics and biases intensifies, especially when System 2 processes are too slow or mentally taxing to keep up (Kahneman, 2011).

The effects of complexity on cognition include:

**3.1 Information Overload:** Leaders may be exposed to excessive amounts of data, making it difficult to discern relevant signals from noise. This increases the likelihood of availability bias, where recent or emotionally salient information dominates attention (Eppler & Mengis, 2004).

**3.2 Ambiguity and Uncertainty:** When cause-effect relationships are unclear, individuals may fall back on mental models based on past experiences, even if these models are no longer valid. This fosters confirmation bias, as people seek data that supports existing beliefs to reduce cognitive dissonance (Festinger, 1957).

**3.3 Decision Fatigue:** Repeated decision-making depletes cognitive resources, making people more susceptible to impulsive choices and default options (Baumeister et al., 1998). In such states, even experienced leaders may show inconsistent judgment.

**3.4 Emotional Stress:** Emotions play a major role in decisions under complexity. Fear, anxiety, or overconfidence can distort risk assessment and increase susceptibility to framing and loss aversion (Lerner et al., 2015).

Moreover, organizational settings add layers of social and systemic complexity and group dynamics, power hierarchies, and organizational culture all shape how decisions are made and biases reinforced. For example, group thinking can suppress dissenting opinions, while organizational incentives may unconsciously steer choices toward short-term gains over long-term value (Janis, 1982).

Traditional management models that assume rational actors and linear cause-and-effect reasoning often fall short in such environments. They neglect the bounded rationality of decision-makers, a concept introduced by Herbert Simon (1955), which acknowledges that humans aim for "satisficing" rather than optimizing under constraints of time, knowledge, and cognitive capacity.

In complex environments, the interplay between human psychology and systemic factors creates fertile ground for biased decision-making. Understanding this relationship is essential for designing interventions that promote better judgments. In the next section, we will examine real-world examples where these mind traps have influenced major business outcomes, sometimes with costly or even catastrophic results.

#### 4. Real-World Case Examples

Understanding cognitive biases becomes far more compelling when illustrated through the lens of real-world decisions. The following case examples demonstrate how biased thinking has led to strategic missteps in complex business environments. Each example is mapped to a specific cognitive bias, showcasing its psychological underpinnings and organizational consequences.

#### **4.1 Case 1: Nokia (Anchoring and Status Quo Bias)**

At its peak, Nokia dominated the global mobile phone industry. However, its reluctance to shift from traditional mobile operating systems (Symbian) to the emerging smartphone paradigm led to a steep decline. Leadership decisions were heavily anchored on past performance metrics and the assumption that their market dominance would persist.

Despite early signs that Apple and Android systems were redefining consumer expectations, decision-makers continued to prioritize hardware over software innovation. Anchoring on historical success and clinging to existing processes delayed critical innovation investments (Vuori & Huy, 2016).

**Psychological Insight:** Anchoring on prior market dominance made executives undervalue emerging market trends. The complexity of shifting to a new OS ecosystem required difficult, ambiguous choices, which were deferred in favor of familiar strategies.

#### **4.2 Case 2: Jet Airways (India) (Overconfidence and Escalation of Commitment)**

Jet Airways, once India's leading airline, embarked on rapid international expansion in the late 2000s. Executives, buoyed by early success, overestimated their ability to manage large-scale operations in a highly volatile industry. Ignoring early warning signs of financial strain, they continued to invest in new routes and aircraft acquisitions. This overconfidence was coupled with escalation of commitment a tendency to persist with failing strategies due to sunk cost fallacies and ego involvement (Staw, 1976). Ultimately, the airline collapsed under mounting debt and operational inefficiencies.

**Psychological Insight:** Complexity in aviation fuel prices, competition, and regulatory issues require constant re-evaluation. Overconfidence blocked adaptive learning and blinded leadership to the need for strategic retreat.

#### **4.3 Case 3: Kodak (Confirmation Bias and Technological Blindness)**

Kodak famously invented the digital camera in the 1970s but refused to commercialize it, fearing cannibalization of its profitable film business. Management selectively focused on internal data affirming the continued relevance of film, ignoring external technological and consumer behavior trends (Tripsas & Gavetti, 2000). As digital technology evolved rapidly, Kodak's leadership clung to outdated assumptions and resisted change until it was too late, ultimately filing for bankruptcy in 2012.

**Psychological Insight:** Confirmation bias narrowed decision-makers' attention to information that validated their existing beliefs. The complex uncertainty around consumer preferences and technological adoption was downplayed in favor of short-term stability.

#### **4.4 Case 4: Satyam Scandal (Groupthink and Ethical Blind Spots)**

In 2009, Satyam Computers, one of India's top IT firms, was rocked by a corporate fraud scandal involving inflated financial reports. Investigations revealed that senior management engaged in collective rationalizations and suppressed dissenting views within the boardroom. Decision-making processes lacked transparency and psychological safety. The drive to maintain external perceptions and avoid internal conflict led to widespread groupthink, where consensus was prioritized over critical evaluation (Janis, 1982). Ethical blind spots were ignored under organizational pressure and misplaced loyalty.

**Psychological Insight:** In complex corporate governance settings, ethical reasoning is deeply influenced by group norms and social pressures. The absence of dissent and diversity of thought allowed deception to persist unchallenged.

#### **4.5 Case 5: Boeing 737 MAX (Framing Effect and Organizational Pressure)**

The Boeing 737 MAX crisis, which resulted in two fatal crashes, was partially attributed to how internal trade-offs were framed. The management framed the design as an "upgrade" to existing models rather than a new system, downplaying the need for pilot retraining. This narrative enabled faster regulatory approval but masked underlying technical complexity and safety

concerns (Gelles et al., 2020).

Table 1. Shows the overall understanding of the cases that have been viewed. Psychological Insight: Decisions were shaped by how information was framed internally and externally. Efficiency was framed as value creation, while safety concerns were minimized in language, reducing their perceived importance.

**Table 1 Cognitive Biases in Real-World Business Cases**

| Company/<br>Case | Context             | Cognitive Bias                                 | Psychological<br>Mechanism                     | Outcome                               |
|------------------|---------------------|--|--|---------------------------------------|
| Nokia            | Global Strategy     | Anchoring,<br>Status Quo Bias                  | Anchoring on<br>past success                   | Delayed<br>innovation,<br>market loss |
| Jet<br>Airways   | Overexpansion       | Overconfidence,<br>Escalation of<br>Commitment | Sunk cost<br>fallacy, ego<br>involvement       | Financial<br>collapse                 |
| Kodak            | Technology<br>Shift | Confirmation<br>Bias                           | Selective<br>attention to<br>validating data   | Missed digital<br>transition          |
| Satyam           | Corporate<br>Ethics | Groupthink,<br>Ethical Blind<br>Spot           | Social<br>conformity,<br>suppressed<br>dissent | Fraud and legal<br>scandal            |

*Note. This table summarizes how specific cognitive biases contributed to strategic failures in complex organizational settings.*

## 5. Psychological Mechanisms Behind the Biases

To effectively mitigate cognitive biases in managerial decision-making, it is essential to understand the psychological mechanisms that drive them. These biases are not random flaws in judgment but are deeply rooted in the architecture of human cognition. They arise as by-products of how the brain processes information under constraints of limited attention, memory, emotional regulation, and social influence.

### 5.1. Limited Cognitive Resources

Humans possess bounded rationality, meaning that they make decisions using limited mental

resources rather than full rational analysis (Simon, 1955). In high-pressure environments with complex, ambiguous inputs, the brain defaults to heuristics mental shortcuts that simplify decision-making. While useful in routine contexts, these shortcuts increase susceptibility to bias when stakes are high or when the problem is unfamiliar.

### **5.2. Attention and Selective Perception**

Cognitive biases often result from how attention is allocated. Leaders tend to focus on salient, recent, or emotionally charged information, ignoring less obvious but critical signals. This is driven by the availability heuristic, where easily recalled examples dominate judgment (Tversky & Kahneman, 1973). Attention also reinforces confirmation bias, as individuals selectively attend to information that supports their existing beliefs (Nickerson, 1998).

### **5.3. Memory and Mental Models**

Our brains store and retrieve information in ways that are inherently pattern-based. Managers often rely on prior experiences or mental models to interpret new problems. However, these models can become outdated or overly generalized, leading to anchoring, where new judgments are tied to initial, often irrelevant, reference points (Tversky & Kahneman, 1974). Memory also plays a role in the escalation of commitment, as leaders remember past investments and feel compelled to justify them, even when new evidence suggests abandoning the path.

### **5.4. Emotion and Affective Influences**

Contrary to the belief that decision-making is purely rational, emotions deeply influence judgment. Under stress, fear, or overconfidence, individuals make quicker, less deliberative decisions. Emotional states can enhance loss aversion or distort framing, depending on whether outcomes are perceived as gains or losses (Lerner et al., 2015). For example, anxiety may lead to risk-averse behavior, while excitement may fuel overconfidence.

### **5.5. Social and Organizational Pressures**

Biases are not only internal but also socially reinforced. In organizational settings, groupthink emerges when dissent is discouraged and consensus is valued over critique (Janis, 1982). Authority structures, loyalty to leaders, and cultural norms often suppress diverse

viewpoints. Furthermore, ethical blind spots arise when organizational goals overshadow individual moral reasoning, especially in environments that reward conformity over accountability. Understanding these mechanisms highlights that bias mitigation requires more than individual awareness; it calls for systemic changes in decision environments. Leaders must be trained not only in strategic thinking but also in psychological literacy: the ability to recognize and adapt to the mental processes that shape decisions.

In the next section, we explore practical tools and techniques to reduce the impact of these biases and foster bias-aware leadership across organizational systems.

## **6. Debiasing Techniques and Practical Tools**

While cognitive biases are deeply ingrained in human thought, they are not immutable. Research in behavioral psychology and organizational science has identified several evidence-based strategies to mitigate the impact of biases on decision-making. These approaches focus on enhancing awareness, slowing down impulsive thinking, and structuring decision environments to promote accuracy, reflection, and diversity of thought.

### **6.1. Individual-Level Debiasing Techniques**

#### **6.1.1. Mindfulness and Reflective Thinking**

Mindfulness practices, intentional, non-judgmental awareness of one's thoughts, help leaders become more conscious of their cognitive processes (Kirk et al., 2016). Reflection breaks automatic thinking patterns associated with System 1 and allows System 2 to engage more actively in decisions. Application: Encourage brief reflection pauses before major decisions. Questions like "What am I not seeing?" or "What evidence contradicts my assumptions?" can slow cognitive shortcuts.

#### **6.1.2. Decision Journals**

Documenting the rationale behind decisions, predictions, and emotions creates a record that leaders can review later. This encourages accountability and reveals patterns of overconfidence or faulty logic over time (Milkman et al., 2009). Application: Maintain a "decision log" for strategic meetings. Reviewing past predictions and outcomes helps identify recurring

biases.

### **6.1.3. Premortem Analysis**

In a premortem, a team assumes a decision has failed and works backward to explain why. This technique counters overconfidence and confirmation bias by surfacing potential risks proactively (Klein, 2007). Application: Before launching a project, ask, "It's one year from now, and this initiative has failed what went wrong?"

## **6.2. Organizational-Level Debiasing Tools**

### **6.2.1. Red Teaming**

Inspired by military intelligence, red teaming involves assigning a group to challenge assumptions and stress-test plans. This structured dissent prevents groupthink and allows constructive conflict (Zenko, 2015). Application: Rotate team members as "devil's advocates" to evaluate key decisions independently from the core team.

### **6.2.2. Structured Decision Frameworks**

Decision-making tools such as multi-criteria decision analysis (MCDA), decision trees, and checklists reduce reliance on intuition by introducing step-by-step logic. Application: Develop checklists for repeated managerial decisions (e.g., hiring, vendor selection) to ensure all key variables are considered.

### **6.2.3. Diversity and Psychological Safety**

Cognitive diversity varied perspectives, experiences, and expertise, reduces collective blind spots. However, its benefits are only realized when psychological safety is present, allowing people to speak up without fear (Edmondson, 1999). Application: Foster inclusive environments where dissent is welcomed, not penalized. Encourage diverse viewpoints during decision reviews.

## **6.3. Technological Support and AI Tools**

As organizations rely more on big data and AI systems, technology can serve as a bias buffer, provided its use is transparent and human oversight is maintained, algorithms can highlight inconsistencies, run simulations, or flag patterns overlooked by human cognition. However,

algorithmic bias must also be monitored to ensure decisions remain fair and ethical. Application: Use predictive analytics in hiring or forecasting, but ensure human review with a bias-awareness checklist.

#### **6.4. Training for Bias-Aware Leadership**

Bias literacy should be embedded into leadership development programs. Research shows that awareness of biases alone is insufficient unless accompanied by practical strategies and habit formation (Bazerman & Tenbrunsel, 2011). Application: Incorporate scenario-based learning, role-play, and cognitive bias workshops into leadership training.

### **7. Bias-Aware Leadership Model**

The increasing complexity of organizational decision-making requires leaders to go beyond traditional management competencies. A key differentiator in effective leadership today is cognitive self-awareness, the ability to understand and manage the psychological processes that influence judgment and behavior. Building on prior sections, this chapter proposes a Bias-Aware Leadership Model (BALM) a practical, psychologically informed approach to decision-making in complex settings.

Core Components of the Bias-Aware Leadership Model

#### **7.1. Self-Awareness and Cognitive Reflection**

At the core of bias-aware leadership is the recognition that no one is immune to bias, regardless of intelligence or experience. Leaders must regularly engage in metacognition, thinking about their own thinking. This includes questioning their assumptions, noticing emotional triggers, and reflecting on past decisions. Example: Regular self-reflection prompts such as “Am I anchoring on outdated data?” or “Have I considered the alternative viewpoint?” build introspective habits that slow down bias-prone System 1 thinking.

#### **7.2. Bias Literacy and Education**

Awareness of specific cognitive biases must be part of leadership development programs. Leaders should be trained not only to recognize common biases but also to understand when and how they arise. Bias literacy improves judgment under uncertainty and helps leaders better

interpret behaviors in others. Tool: Conduct workshops that use real-world dilemmas, decision simulations, and debriefs to link psychological theory with practice.

### **7.3. Structured Decision Architecture**

Leaders should implement decision-making protocols that reduce cognitive strain and support critical thinking. This involves standardizing procedures such as Premortem exercises, independent team reviews (e.g., red teams), multi-criteria evaluation templates, Decision logs for accountability, and Organizational benefit methods to promote consistency and reduce the influence of individual preferences or social dominance.

### **7.4. Psychological Safety and Diversity of Thought**

Cognitive biases thrive in echo chambers. A bias-aware leader fosters an environment where diverse perspectives are encouraged, and team members feel safe to question prevailing assumptions. Psychological safety allows cognitive diversity to function as a check against blind spots. Practice: Rotate devil's advocate roles and regularly include cross-functional voices in strategic discussions.

### **7.5. Feedback and Adaptive Learning**

Bias-aware leadership is a continuous learning process. Leaders must solicit feedback loops not only about outcomes but also about the reasoning behind decisions. Learning from both failures and successes helps recalibrate future judgments. Application: After key decisions, hold debrief sessions focused on what assumptions were made, what was missed, and how biases may have played a role.

**Integrating BALM into Organizational Culture:** Bias-aware leadership is not an isolated skill but a mindset that should permeate organizational culture. Leaders can model the BALM framework through transparency in decision-making, openness to feedback, and visible use of structured tools. Over time, this creates a culture where critical thinking, accountability, and psychological insight are valued alongside strategic execution.

## 8. CONCLUSION AND FUTURE DIRECTIONS

In today's turbulent business landscape, where complexity is the norm rather than the exception, the ability to make sound decisions is increasingly challenged by the limits of human cognition. This chapter has examined how cognitive biases, deeply ingrained mental shortcuts, interfere with managerial decision-making in complex environments. Drawing on insights from cognitive psychology, behavioral science, and management literature, we have highlighted how these biases manifest, why they persist, and most importantly, how they can be addressed.

Through case studies from both global and Indian corporate settings, we have seen how anchoring, confirmation bias, overconfidence, groupthink, and framing effects have led to strategic missteps and, in some cases, catastrophic failures. These are not isolated incidents of poor judgment but are predictable consequences of biased thinking, often amplified by organizational culture, stress, and time pressure.

Understanding the psychological mechanisms behind these biases, such as limited attention, emotional reasoning, social conformity, and bounded memory, enables leaders to recognize when their decisions may be vulnerable to distortion. The proposed Bias-Aware Leadership Model (BALM) offers a practical and evidence-based framework for addressing these vulnerabilities. By combining self-awareness, bias literacy, structured decision-making tools, psychological safety, and feedback mechanisms, BALM equips leaders to act more mindfully and effectively in the face of complexity.

Looking ahead, both researchers and practitioners have a vital role to play in deepening the integration of psychology into organizational leadership. Future research could explore: The interaction between digital decision-support tools and human biases, especially in AI-augmented environments. The cultural dimensions of bias, how societal values and norms shape which biases are more pronounced in certain regions or industries. Longitudinal studies measure how bias-awareness training impacts organizational performance over time.

For practitioners, embedding bias awareness into leadership development, strategic planning, and performance evaluation can yield significant benefits, not just in terms of better

decisions but also in fostering a culture of critical thinking and accountability.

In conclusion, navigating complexity is not just a matter of data or logic it is a psychological challenge. Leaders who understand the workings of the mind and actively design their environments to mitigate its flaws are better equipped to lead resilient, innovative, and ethically grounded organizations. By unraveling the hidden forces that shape our thinking, we empower decision-makers to make wiser choices not just for their businesses, but for the systems and societies they influence.

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## CORRELATIONAL STUDY ON INTERNET ADDICTION AND MENTAL HEALTH AMONG HOSTEL STUDENTS

M Yasinabani

Asst. Prof & Head i/c

Department of Psychology,

Auxilium College (Autonomous), Vellore

### ABSTRACT

**Background:** India is home to the world's second-largest internet user base, with over 900 million users in 2025. A sharp rise from just 100 million in 2010, reflecting the nation's extraordinary digital transformation. In this context, the study aims at finding internet addiction (IA) and mental health among hostel students. **Objectives:** The objective of the study is to establish the relationship between the internet addiction and mental health of postgraduate students among hostellers. **Materials and Methods:** The sample for the present study consisted of 104 postgraduate students, age ranging from 20 to 25 years randomly selected from hostel students. Internet Addiction Test (IAT) and PGI General Well-being tools were used. The present study investigation of descriptive design. This study adopted simple random sampling technique. Data were analysed using the SPSS software and ANOVA. **Results:** The results of the study revealed no significant gender differences in internet addiction ( $t = 1.25$ ) and psychological well-being ( $t = 0.61$ ). No significant difference in residence in IA ( $t = 0.05$ ) and PGI ( $t = 0.65$ ). Negatively correlated between Internet Addiction and Psychological Well-being.

**Conclusion:** The Present study concluded that among postgraduate hostel students of Sacred Heart College, Tirupattur. Internet addiction did not significantly influence psychological well-being. postgraduate students, participants might already possess better coping strategies, time management skills, and peer/social support, which buffer the negative effects of internet use. Internet usage in this group may be more academic or

socially supportive rather than purely addictive, thereby reducing its detrimental impact on psychological well-being.

**Keywords:** Internet Addiction, Mental Health, Psychological Well-being, Hostellers.

## INTRODUCTION

India's growing reputation as a digitally connected nation has been largely shaped by the widespread availability and use of the internet. While this technological advancement offers numerous benefits, in recent years, internet addiction (IA) has emerged as a significant global mental health concern requiring special attention. In India, internet use has increased across all age groups, with particularly high prevalence among adolescents and university students. Previous studies have highlighted associations between internet addiction, depression, and academic performance in student populations (Kumar & Kumar, 2020). Internet addiction has been found to negatively affect mental health and disrupt daily functioning. Hostel students, in particular, may be more vulnerable to excessive internet use, as they often experience less parental monitoring and rely heavily on the internet for both academic and social purposes.

Among college students, especially those residing in hostels, the internet often serves as a primary medium for both academic activities and social interaction. However, this dependence may also foster maladaptive patterns of use that contribute to stress, poor sleep quality, anxiety, and reduced psychological well-being. Several Indian studies have documented significant associations between internet addiction and depression, anxiety, and stress (Sharma et al., 2019; Dehradun Medical Study, 2020; Eastern India Study, 2024). At the same time, other research has reported no significant differences in IA levels based on residence (Patiala Study, 2017; Jodhpur Study, 2019), suggesting that the role of hostel environments remains unclear. Recent Indian samples often find 20–35% meeting thresholds for at least “problematic/potential” IA, with male students frequently showing higher odds; co-prevalence of anxiety (60–70%), depression (60–65%), and insomnia (24%) is reported in some cohorts. Across Indian student samples, IA commonly co-occurs with depression, anxiety, stress, and insomnia. Multi-site and state-level studies (Delhi, Rajasthan, West Bengal, national nursing/medical cohorts) consistently report significant associations between higher IA and worse mental-health

scores.

In this context, the present study was undertaken to explore the relationship between internet addiction and psychological well-being among postgraduate hostel students of Sacred Heart College. By focusing on this unique cohort, the study seeks to clarify whether gender or

residence influence internet use patterns, and whether internet addiction significantly impacts psychological well-being in a structured hostel environment.

### **OBJECTIVES OF THE STUDY**

1. To establish the relationship between the internet addiction and mental health.
2. To measure the level of using internet affects mental health on postgraduate students.
3. To find out the significance difference between the variables among hostellers.

### **HYPOTHESIS OF THE STUDY**

1. Ha: There will be a significant difference in the internet addiction and psychological well-being on the basis of gender.
2. Ha: There will be a significant difference between the internet addiction and psychological well-being on the basis of residence.
3. Ha: There will be a significant difference in the internet addiction and psychological well-being on the basis of age.
4. Ha: There will be a significance difference between the internet addiction and psychological well-being.

### **METHODOLOGY**

#### **SAMPLE**

The sample for the present study consisted of 104 postgraduate students (53 males and 51 females), age ranging 20 to 25 years randomly selected from hostel students.

## RESEARCH DESIGN AND DATA ANALYSIS

The present study investigation of descriptive design. This study adopted simple random sampling technique. The data was collected with Statistical Package for Social Science (SPSS) version 23 was used for the analysis. Appropriate statistics was used such as independent sample t-test, correlation etc. to assess the relationship between the internet addiction and mental health.

### RESEARCH TOOLS

#### 1) *Internet Addiction Test (IAT)*

IAT was compiled by Kimberly S. Young (1998). The scale contains 20 items on a five-point Likert scale from “Not Applicable to Always”.

#### 2) *PGI General Well-being*

Measures by Verma and Verma (1989). It is a tool to measure positive mental health of Indian subjects. The scale consisted of statement pertaining to Well-being, Life satisfaction, Feeling of belongingness and Emotional stability. Reliability of the scale was found to be 0.98 (Verma, Dubey and Gupta, 1983). The validity of the test was computed with number of tests such as PGI Quality of Life Scale (Moudgil et al., 1986) with correlation of 0.54, PGI Locus of Control Scale with correlation of 0.41 (Moudgil et al., 1986), General Satisfaction Level Rating with correlation of 0.235 (Verma, Mahajan and Verma, 1989).

## RESULTS AND DISCUSSION

The present study attempted to assess the relationship between the internet addiction and mental health of hostel students.

**Table-1 Internet addiction and psychological well-being on the basis of gender.**

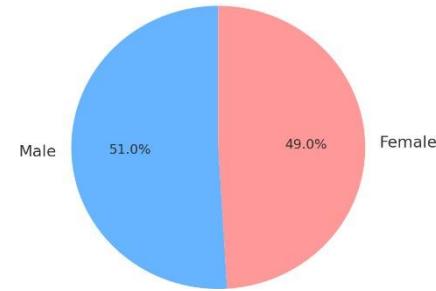
| Variables                | Male<br>(N=53) | Female<br>(N=51) |       |     |       |         |
|--------------------------|----------------|------------------|-------|-----|-------|---------|
|                          |                | t-value          | M1    | SD1 | M2    | SD2     |
| Internet Addiction       | 66.94          | 24.41            | 1.43  |     | 20.21 | 1.25 NS |
| Psychological well-being | 26.36          | 4.39             | 26.88 |     | 4.27  | 0.61 NS |

NS-Not Significant, M-Mean, SD-Standard Deviation

*Ha: "There will be a significant difference in the internet addiction and psychological wellbeing on the basis of gender".*

**Table 1:** It is found that "t" values are not significant for the internet addiction and psychological well-being on the basis of gender. Hence the hypothesis is not confirmed. There was no difference between male and female participants in internet addiction and psychological well-being.

Gender Distribution of Participants



**Figure 1:** Exposure to internet usage between male and female students.

**Table-2 Internet addiction and psychological well-being on the basis of residence.**

| Variables                | Urban   |       | Rural |       | SD2     |
|--------------------------|---------|-------|-------|-------|---------|
|                          | t-value | M1    | SD1   | M2    |         |
| Internet Addiction       | 64.34   | 21.05 | 64.11 | 24.54 | 0.05 NS |
| Psychological well-being | 26.37   | 4.05  | 26.93 | 4.67  | 0.65 NS |

NS-Not Significant, M-Mean, SD-Standard Deviation

*Ha: "There will be a significant difference between the internet addiction and psychological well-being on the basis of residence".*

**Table 2:** It is found that "t" values are not significant for the internet addiction and psychological well-being on the basis of residence. Hence the hypothesis is not confirmed. There was no difference between urban and rural participants in internet addiction and psychological well-being.

**Table-3 significant difference in the internet addiction and psychological well-being On the basis of age.**

**ANOVA**

|          |                | Sum of Squares | df  | Mean Square | F    | Sig. |
|----------|----------------|----------------|-----|-------------|------|------|
| IA_TOTAL | Between Groups | 1849.075       | 5   | 369.815     | .720 | .610 |
|          | Within Groups  | 50369.916      | 98  | 513.979     |      |      |
|          | Total          | 52218.990      | 103 |             |      |      |
| WB_TOTAL | Between Groups | 12.447         | 5   | 2.489       | .127 | .986 |
|          | Within Groups  | 1914.168       | 98  | 19.532      |      |      |
|          | Total          | 1926.615       | 103 |             |      |      |

NS-Not Significant, M-Mean, SD-Standard Deviation

*Ha: “There will be a significant difference in the internet addiction and mental health on the basis of age”*

**Table 3:** It is found that “F” values are not significant for the internet addiction and psychological well-being on the basis of age. Hence the hypothesis is not confirmed. There is no difference in internet addiction and psychological well-being among the age group between 20 to 25.

**Table-4 significant difference in the internet addiction and psychological well-being**

| Variable           | Psychological well-being |
|--------------------|--------------------------|
| Internet Addiction | -0.38 <sup>**</sup>      |

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

Ha: There will be a significance difference between the internet addiction and psychological well-being.

**Table 4:** It revealed that the hostel students are highly affected with internet usage and they are

psychologically affected during the pandemic. It is negatively correlated between psychological well-being and internet addiction.

## CONCLUSION

The findings of the present study revealed that there is no significant relationship between the internet addiction and psychological well-being of postgraduate students among hostellers. The sample size may have been insufficient to detect subtle differences. As postgraduate students, participants might already possess better coping strategies, time management skills, and peer/social support, which buffer the negative effects of internet use. Additionally, cultural and institutional factors, such as hostel community life and college guidance, may have provided a protective effect against adverse psychological outcomes.

## LIMITATION

A relatively small sample size may have reduced the statistical power to detect subtle but meaningful relationships between internet addiction and psychological well-being.

## ACKNOWLEDGEMENT

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## **"E-commerce Integration in Social Media"**

**Ms. Sharayu C. J.**

Assistant Professor

Department of Journalism

BMS College for Women, Autonomous

Basavanagudi Bengaluru, Karnataka, India

**Sandya S. C.**

Assistant Professor

Department of Journalism

NMKRV College Autonomous

Jayanagar III Block, Bengaluru Karnataka, India

### **ABSTRACT**

The integration of e-commerce within social media platforms has emerged as a transformative trend reshaping the digital marketplace. This integration, commonly known as social commerce, leverages the widespread reach and interactive capabilities of social media to facilitate seamless shopping experiences. The convergence of e-commerce and social media enables businesses to engage consumers directly, fostering enhanced brand awareness, trust, and customer loyalty through user-generated content, peer recommendations, and influencer marketing. Consumer behavior research highlights the critical role of social interactions and social proof in shaping purchase intentions on these platforms. Additionally, social media analytics provide valuable insights into consumer preferences, enabling personalized marketing strategies and targeted advertising that improve conversion rates. Despite its potential, the integration faces challenges such as privacy concerns, platform interoperability, and ensuring secure transactions. Mobile social commerce is rapidly growing, further emphasizing the importance of optimized user experiences across devices. Future trends indicate increasing adoption of artificial intelligence, augmented reality, and blockchain technologies to enrich social commerce ecosystems. This paper synthesizes current research on the multidimensional impact of e-commerce integration in social media, highlighting both its opportunities and limitations, and outlines directions for future research to maximize the effectiveness of social commerce in a digital world.

E-commerce has undergone a revolutionary transformation through its integration with social

media platforms, enabling seamless shopping experiences and personalized marketing. This paper explores the evolution, mechanisms, benefits, challenges, and future of social commerce, highlighting key platforms like Instagram, Facebook, TikTok, and Pinterest. Through an in-depth analysis of business models, user behavior, and emerging technologies, we examine how social media is redefining the digital retail experience and the implications for consumers, brands, and technology developers.

**Key Words** - E-Commerce Integration, Consumer Behavior, Social Media, Digital Marketing, Artificial Intelligence, Augmented Reality.

## INTRODUCTION

The intersection of e-commerce and social media has created a new paradigm known as social commerce, where buying and selling activities are embedded directly within social platforms. Traditionally, e-commerce relied on standalone websites or marketplaces like Amazon, while social media was primarily used for branding and engagement. Today, platforms like Instagram, Facebook, and TikTok are blurring these lines, offering end-to-end shopping experiences without leaving the app.

This paper investigates how e-commerce is integrated into social media, the strategic motivations behind it, its effect on consumer behavior, and its implications for the digital economy.

### **Benefits of Social Media E-Commerce Integration**

#### **1) Seamless User Experience**

Users no longer need to leave the app to complete a purchase, reducing friction and increasing conversion rates.

#### **2) Data-Driven Personalization**

Social platforms have vast data on user preferences and behaviors, allowing highly targeted and personalized product recommendations.

#### **3) Community Engagement and Trust**

Social commerce leverages peer reviews, comments, and influencers, creating a sense of community trust that traditional e-commerce lacks.

#### **4) Lower Barriers to Entry for Businesses**

Small businesses can establish a digital storefront and reach global audiences without the need for complex infrastructure.

## CASE STUDIES

- **Instagram and Fashion Retail**

Brands like ZARA and Nike have successfully used Instagram Shopping to convert engagement into sales. Product tags in reels and stories allow users to instantly buy items showcased in influencer content.

- **TikTok and Beauty Brands**

TikTok's "For You Page" algorithm has turned beauty products like The Ordinary and CeraVe into viral sensations. TikTok Shop allows creators to link products in videos, facilitating impulsive, in-app purchases.

- **Facebook Marketplace and Local Commerce**

Facebook Marketplace has evolved into a platform for both peer-to-peer and business-to-consumer (B2C) transactions, especially effective for local goods and services.

## LITERATURE REVIEW

**Chen et al. (2015)** emphasizes that trust mechanisms like secure payment systems and transparent reviews on social media sites are critical for successful e-commerce integration in their paper 'Consumer Trust in Social Commerce'.

**Kaplan and Haenlein (2010)** in their 'Social Media as a Platform for E-commerce' paper, highlighted about how social media platforms evolved from mere communication tools to full-fledged marketing channels, enabling direct sales and e-commerce integration.

**Kapoor et al. (2020)** predicted that increased AI integration, augmented reality shopping experiences, and blockchain for secure transactions as future trends in social commerce in the paper 'Future Trends in Social Media E-commerce Integration'.

**Kim and Ko (2012)**, in their findings from the paper 'Effect of Social Media on Brand Loyalty' that active brand's presence and engagement on social media contribute significantly to building long-term customer loyalty.

**Mikalef et al. (2013)** noted in their paper 'Social Media Tools for Enhancing Customer Engagement' that tools like live chat, reviews, and user-generated content on social media improve customer engagement, which enhances e-commerce sales.

**Stephen and Galak (2012)** in their paper 'Social Media Metrics and E-commerce Success' discuss how likes, shares, and comments serve as social proof and influence online buying behavior

positively.

**W. Glynn Mangold and David J. Faulds (2009)** in their paper 'Influence of Social Media Marketing on Sales' discussed how social media acts as a hybrid element of promotion, blending traditional marketing with direct consumer engagement, which positively impacts sales conversion.

**Wang and Zhang (2012)** in their paper 'Social Media Platforms and Purchase Intentions' showcase those social media interactions significantly increase consumers' purchase intentions by providing more product information and peer validation.

**Xu et al. (2014)** describe in the paper titled 'Cross-platform Integration for Enhanced Sales' the strategies for integrating e-commerce with multiple social media channels to create omnichannel shopping experiences.

**Zhou et al. (2013)** in the paper titled 'Integration Challenges of E-commerce in Social Platforms' identify technical and privacy challenges that limit seamless integration of e-commerce into social platforms.

## FUTURE TRENDS

- Augmented Reality (AR) Shopping
- Snapchat and Instagram are developing AR tools for virtual try-ons of makeup, clothing, and accessories.
- AI-Powered Personal Shoppers
- AI chatbots and recommendation engines are being embedded in social commerce platforms to enhance the shopping experience.
- Blockchain and Social NFTs
- Some platforms are exploring NFTs as a means of authenticating digital goods and enhancing user engagement in social commerce ecosystems.
- Cross-Platform Shopping Ecosystems
- E-commerce platforms like Shopify are partnering with multiple social platforms to create integrated omnichannel experiences.

## CHALLENGES AND LIMITATIONS

### **Data Privacy Concerns**

With increasing scrutiny on data collection practices, platforms integrating commerce must comply with GDPR, CCPA, and other regulations, while balancing personalization. (Research Thesis by [Ognjen Pantelic, Kristina Jovic, and Stefan Krstovic](#))

### **Platform Dependence**

Brands reliant on social platforms risk losing access to their audience due to algorithm changes or policy shifts. (Research by Klonick (2019))

### **Consumer Trust and Fraud**

Social platforms can be susceptible to counterfeit products, scams, and lack of quality control compared to established e-commerce sites. ([Boyle \(2003\)](#) and [Klein et al. \(1997\)](#))

### **Logistics and Fulfilment**

Unlike traditional e-commerce platforms, social media platforms often lack native fulfilment infrastructure, requiring third-party integration or external support.

## MAJOR FINDINGS

- 1) Social commerce is changing how people shop by making buying part of social media interactions.
- 2) In-app shopping features (like Instagram Shop, TikTok Shop) make purchases easier and increase sales.
- 3) Social media platforms use data to give personalized product recommendations and ads. Trust comes from reviews, influencers, and community opinions more than from the brand itself.
- 4) Small businesses can reach big audiences through social media without needing big investments.
- 5) Challenges include privacy issues, dependence on platforms, scams, and delivery problems.
- 6) Most social commerce happens on mobile phones, so mobile-friendly design is essential. Future growth will be shaped by new technologies like AR try-ons, AI shopping assistants, and blockchain for product authenticity.

## FURTHER SCOPE FOR RESEARCH

### 1) Long-Term Impact of Influencers

Explore whether influencer-driven sales create short-term boosts or long-term brand loyalty.

### 2) Comparison with Traditional E-commerce

Compare the effectiveness of social commerce versus traditional e-commerce platforms (like Amazon) in terms of trust, sales, and customer retention.

### 3) Consumer Privacy and Data Ethics

Investigate how privacy regulations (GDPR, CCPA, etc.) affect consumer trust and platform strategies.

### 4) Role of Emerging Technologies

Examine how AI, AR, VR, and blockchain transform shopping experiences and consumer decision-making.

### 5) Sustainability in Social Commerce

Research how eco-conscious brands and sustainable business practices perform in social media marketplaces.

## CONCLUSION

Integrating e-commerce with social media is more than a trend; it represents a transformative change in the way business is done. It makes retail more accessible, improves the user experience, and revolutionizes marketing and sales approaches. However, to sustain long-term success, platforms and businesses must address trust, privacy, and logistical challenges while continuing to innovate.

The future of commerce is social driven by community, powered by technology, and enabled by platforms that merge content with commerce in real time.

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## “U.S. influence on India and China's geopolitics in the Indo-Pacific region”

**Valmik Nivrutti Arote**

Research Scholar,

K. J. Somaia Arts, Commerce and Science College, Mohani Rajnagar, Tal. Kopargaon, Dist. Ahmednagar. Affiliated to Savitribai Phule Pune University, Pune. (MS)

**Dr. Suresh Manjuladas Devre**

Associate Professor,

K. J. Somaia Arts, Commerce and Science College, Mohani Rajnagar, Tal. Kopargaon, Dist. Ahmednagar. Affiliated to Savitribai Phule Pune University, Pune. (MS)

### ABSTRACT

“The Indo-Pacific is increasingly regarded as the strategic hub of the 21st century and a critical stage in world politics, where the United States holds a pivotal role in influencing the course of this competition. In this region, India and China are engaged in a contest to establish their influence. The United States plays a crucial and determining role in this rivalry. America's military presence, economic policies, and diplomatic initiatives provide support to India while creating challenges for China. This article examines the role of the United States through three dimensions strategic, economic, and diplomatic. The study concludes that America simultaneously strengthens India against China and accelerates the rivalry.

**Key Concepts:** Indo-Pacific, India–China rivalry, United States, QUAD, AUKUS, geopolitics.

### INTRODUCTION

The Indo-Pacific stands at the heart of contemporary geopolitics, attracting significant international attention. Approximately 60 percent of international trade is conducted through this region, which includes strategic corridors such as the Strait of Malacca and the South China Sea. This importance has driven India and China to pursue greater influence and control within the region.

India has been strengthening its standing by advancing the Act East Policy and the SAGAR Vision

(Security and Growth for All in the Region). On the other hand, China has been asserting dominance through the Belt and Road Initiative (BRI) and maritime expansion. In this ongoing contest, the involvement of the United States is of great importance, as it has long been a dominant power in international politics and the Pacific Ocean.

## **REVIEW OF LITERATURE**

Over the last two decades, extensive scholarship has emerged on the Indo-Pacific concept, the India–China rivalry, and the role of the United States. This body of literature can broadly be classified into four streams:

1. Conceptual and theoretical writings
2. Policy- and strategy-oriented studies
3. Regional and sub-regional analyses
4. Technology and political economy-related studies

The following subsections summarize the main arguments, methodologies, and identified research gaps.

### **1) Concept of the Indo-Pacific and Power Balance**

The Indo-Pacific framework provides a broader geopolitical construct than the Asia-Pacific, by linking the Indian and Pacific Oceans together. Scholars like C. Raja Mohan and Amitav Acharya view the Indo-Pacific as a multipolar security network, moving beyond the traditional “hub-and-spoke” alliance system.

According to John J. Mearsheimer’s offensive realism, China’s rise naturally pushes other states toward balancing rather than bandwagoning, with the United States acting as the primary balancer. In contrast, G. John Ikenberry’s liberal perspective argues that competition can be managed through institutional commitments and a rules-based order.

The overall conclusion is that the Indo-Pacific is not a unipolar region but rather a dynamic arena defined by shifting alliances and partnerships.

### **2) Evolution and Continuity of U.S. Indo-Pacific Strategy**

American policy has shown continuity across three major stages:

Obama Era: “Pivot to Asia / Rebalance”

Trump Era: “Free and Open Indo-Pacific (FOIP)”

Biden Era: Strengthening alliances and partnerships

Writings of Ashley J. Tellis and Evan A. Feigenbaum emphasize that the U.S. maritime presence, military bases (Japan, Guam, Philippines), and partnerships (Japan, Australia, India) create deterrence by denial against China.

Meanwhile, Kurt Campbell highlights new elements of U.S. strategy such as co-investment, supply-chain resilience, and technology safeguards, which constitute the pillars of the evolving Indo-Pacific agenda.

### **3) India–China Competition: Land vs. Maritime Routes**

A large portion of the literature on India–China relations highlight the contrast between India’s SAGAR Vision and Act East Policy and China’s Belt and Road Initiative (BRI) / Maritime Silk Road.

Tanvi Madan, Happymon Jacob, and Harsh V. Pant underline the paradox of competitive coexistence in India–China relations.

Oriana Skylar Mastro and Andrew S. Erickson analyze maritime power balance, the capabilities of the PLA Navy, and China’s anti-access/area denial (A2/AD) mechanisms.

This stream also discusses shifts in India’s strategic posture following Doklam (2017) and Galwan (2020), as well as the implications of U.S.–India defense agreements (LEMOA, COMCASA, BECA).

### **4) QUAD and AUKUS: Platform-Based Balancing**

Abundant literature exists on frameworks like QUAD (India, U.S., Japan, Australia) and AUKUS (Australia, U.K., U.S.).

According to Rory Medcalf, Dhruva Jaishankar, and Jeffrey Hornung, QUAD is not a hard alliance but a case of functioning minilateralism, focusing on cooperation in vaccines, maritime domain awareness (MDA), infrastructure, and technology standards.

Studies on AUKUS (e.g., Becca Wasser) highlight that Australia’s nuclear-powered submarines will strengthen Western maritime deterrence, but may also create a security dilemma for ASEAN states.

### **5) South Asia and the Indian Ocean Littoral: Hedging Strategies of Small States**

Literature on countries such as Sri Lanka, Maldives, Nepal, Bangladesh, and Myanmar focuses on debt diplomacy and port geopolitics (e.g., Hambantota, Gwadar).

Scholars like S. D. Muni and Nilanthi Samaranayake show that smaller states practice economic balancing between India, China, and the United States to mitigate risks.

The U.S. presence in this context is mainly reflected through development finance initiatives (DFC/PGII), strengthening coast guard capabilities, and fostering diplomatic coordination.

### **6) Maritime Security, Maritime Law, and FONOPs**

Extensive research covers UNCLOS, Freedom of Navigation Operations (FONOPs), grey-zone tactics, Maritime Domain Awareness (MDA), and Illegal, Unreported and Unregulated (IUU) fishing.

Analysts like James Kraska and Abhijit Singh (ORF) argue that U.S. FONOPs and partner-led MDA networks counter unilateral claims in the South China Sea.

For India, the Andaman–Nicobar–Malacca corridor provides chokepoint leverage in maritime strategy.

### **7) Identified Research Gaps**

1. Integrated models of triangular dynamics from the Indian perspective—Most studies are U.S.- or East Asia-centric; limited Indian models combining security and political economy.
2. Quantitative assessments—Little measurement of QUAD/AUKUS initiatives (e.g., frequency of MDA events, FONOPs, supply-chain indices).
3. Micro-hedging by small states—Comparative studies on Maldives, Sri Lanka, and Myanmar remain limited.
4. Technology and legal frameworks—Few long-term studies on how U.S.–India cooperation in 5G/6G, AI, and cyber-ecosystems shapes the India–China rivalry.
5. Hybrid and grey-zone operations—Insufficient India-centric analysis of information warfare, paramilitary use, and lawfare.

### **RESEARCH OBJECTIVES**

1. To study the U.S. Indo-Pacific strategy from an Indian perspective.
2. To analyze how the United States strengthens India's role in the region.
3. To examine the impact of U.S.–China rivalry on India–China relations.
4. To evaluate the implications of this triangular equation (India–U.S.–China) on regional stability.
5. To understand the significance of the Indo-Pacific region for India.

## METHODOLOGY

This study is based on a qualitative approach. The sources include reports of U.S., Indian, and international think tanks, government documents, scholarly writings, and policy speeches. Comparative and analytical methods have been employed for interpretation.

## DISCUSSION AND ANALYSIS

### **1) Evolution of U.S. Policy**

#### **Cold War Era:**

The U.S. achieved regional dominance in the Pacific largely due to its defense agreements with Japan, South Korea, and Australia. During this time, India followed a policy of non-alignment, while China alternated between anti-American and pro-American stances.

#### **Post-Cold War:**

With China's rapid economic growth, challenges arose to America's unipolar dominance.

#### **Obama Administration:**

During his presidency, Barack Obama officially emphasized the Indo-Pacific's strategic importance through the "Pivot to Asia" policy.

#### **Trump Administration:**

Under Donald Trump, the Free and Open Indo-Pacific (FOIP) strategy adopted a tough stance against China.

#### **Biden Administration:**

President Joe Biden reinforced the QUAD grouping and created new frameworks such as AUKUS, reflecting deeper U.S. security commitment in the region.

### **2) U.S. Support to India**

#### **Defense Cooperation:**

Bilateral defense cooperation has deepened through agreements such as LEMOA (2016), COMCASA (2018), and BECA (2020).

#### **Joint Military Exercises:**

The Malabar drills serve as a symbol of defense collaboration among India, the United States, Japan, and Australia.

#### **Technology and Trade:**

The U.S.–India nuclear agreement and cooperation in critical technologies have further strengthened bilateral ties.

### **3) U.S. as a Competitor to China**

#### **Alternatives to BRI:**

Initiatives like the Blue Dot Network and Partnership for Global Infrastructure and Investment (PGII) are designed to counter China's expanding influence in global supply chains.

#### **Military Presence:**

American bases in Japan, Guam, the Philippines, and Diego Garcia serve as strategic counters to China's growing footprint.

#### **Economic Pressure:**

U.S. restrictions on Chinese firms such as Huawei and ZTE highlight its attempts to curb China's technological and economic reach.

### **4) QUAD and AUKUS as U.S. Instruments**

#### **QUAD:**

For India, QUAD has become the most significant platform for maritime cooperation, bringing together the U.S., India, Japan, and Australia.

#### **AUKUS:**

Through AUKUS, the U.S. and the U.K. provide Australia with nuclear-powered submarine technology, thereby enhancing deterrence against China.

While QUAD offers India direct benefits, AUKUS symbolizes America's broader security commitment in the Indo-Pacific.

### **5) Implications for the India–China Rivalry**

#### **Benefits for India:**

Enhanced defense and naval capabilities with U.S. support

Recognition as a key Indo-Pacific partner on the global stage

New opportunities in technology and trade

#### **Challenges for China:**

U.S.–India cooperation is perceived as a counter to China's aggressive policies

China's efforts to expand influence in South Asia (Sri Lanka, Pakistan, Nepal) and naval bases at Djibouti, Gwadar, Hambantota face growing resistance

### **Regional Stability:**

U.S. presence in the Indo-Pacific constrains Chinese dominance but simultaneously heightens regional tensions. ASEAN nations and smaller states are attempting to maintain a balance of power.

### **CONCLUSION**

The United States plays a dual role in the India–China rivalry in the Indo-Pacific region: as a balancer and as a catalyst. On the one hand, it strengthens India strategically, economically, and diplomatically; on the other hand, it fuels China’s insecurity and accelerates the competition. Consequently, rivalry in the Indo-Pacific has intensified.

In the future, regional stability and the nature of the global order will largely depend on this triangular equation between India, the United States, and China. For India, keeping the Indo-Pacific open and free is essential, as it considers the region critical to its national interests and seeks to maintain a traditional sphere of influence there.

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**PIJPSS-PSY-07-04-014**

## **Social Emotional Learning (SEL) and English Language Development in Primary Classrooms**

**Mrs. R.Nithia,**

M.Sc, B.Ed, D.T.Ed,

SEL Educator & Primary School Teacher,

Pondicherry.

### **ABSTRACT**

This project explores the integration of Social Emotional Learning (SEL) into English language classrooms for primary school children, particularly those learning English as a second language. Grounded in the framework of the New Education Policy (2020) and inspired by UNESCO MGIEP's SEL initiatives, the study demonstrates how SEL can enhance both language acquisition and holistic development. Activities such as emotion identification through emojis, affirmations, gratitude exercises, greeting card creation, and inquiry-based learning were implemented to foster emotional awareness, self-expression, and interpersonal skills. The findings suggest that SEL not only improved children's English literacy skills but also enhanced their empathy, self-esteem, creativity, and problem-solving abilities. Children with specific learning needs actively participated, gaining confidence and resilience. The study concludes that integrating SEL within language classrooms creates a supportive and inclusive environment, enriching both academic and social-emotional competencies and preparing students for long-term success.

**Keywords:** Social Emotional Learning, English as a Second Language, Emotional Intelligence, Primary Education, Holistic Development, New Education Policy (2020)

### **INTRODUCTION**

Social Emotional Learning (SEL) is an educational methodology that enhances students' emotional understanding, empathy, and decision-making skills. It promotes responsible goal-setting, achievement, and the development of positive relationships. SEL originated in the 1960s at Yale School of Medicine's Child Study Center under the leadership of Professor James Comer. Initially

aimed at addressing students' social and emotional needs, this approach has now expanded globally (Comer, 1969).

The present project was inspired by online SEL courses for teachers and schools conducted by UNESCO MGIEP Mahatma Gandhi Institute of Education for Peace and Sustainable Development. This paper explores how SEL can be effectively integrated into English language classrooms, particularly for children learning English as a second language.

## RATIONALE

In multilingual contexts, children often prefer to converse in their mother tongue. Since English is rarely spoken at home, many children perceive it as a difficult subject. Their exposure to the language is often limited to classrooms and textbooks, which are disconnected from their daily lives. Therefore, it is essential to create practical, interactive experiences that enable children to learn English meaningfully and apply it in real-life situations.

Behavioral challenges such as bullying, low self-esteem, and attention difficulties are common in primary classrooms, particularly among children with learning needs. Addressing such behaviors diverts resources away from academic learning. Consequently, integrating SEL into English learning can help children develop interpersonal and emotional skills, thereby fostering both academic and social success. Early introduction of SEL equips students with strategies to handle emotionally challenging situations and build resilience.

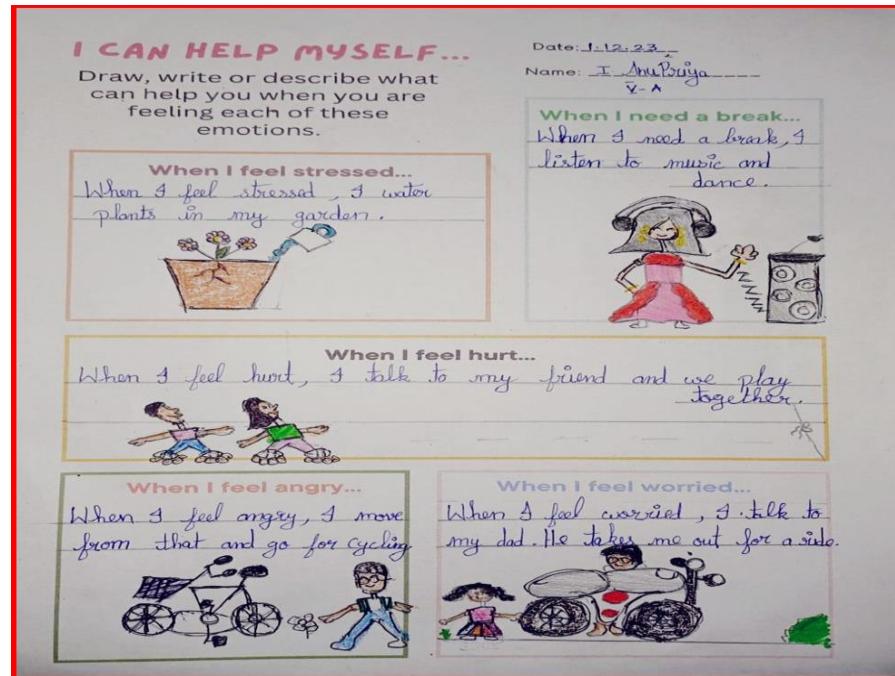
## OBJECTIVES

The project was designed with the following objectives:

1. To create interest in expressing thoughts in the English language by connecting learning to children's daily life activities.
2. To facilitate active participation among children with specific learning difficulties.
3. To integrate social-emotional skills in primary school children to enhance engagement, holistic development, and long-term success.

## METHODOLOGY AND ACTIVITIES

### Reaching Out to Address the Child's Emotion



In greeting time (circle time), the teacher discusses with students how they feel. The reason for their emotions will also be discussed. She introduced eighteen emoji pictures such as a happy face, a tired face, a sad face, etc. Each emoji will have its corresponding descriptive word, which the child will be able to match. Children will identify the emotions through emojis, such as I am happy, I am tired, etc. Later, they tried to read and write the emotion they felt with appropriate emoji drawings and wrote it. Once they write it individually, they are motivated to come forward and speak in front of the class. They will be encouraged to describe why they felt so and explain it in one or two sentences.

When children express their emotions, they often seek solutions to their problems. This can help them develop problem-solving skills as they learn to address the issues causing their emotional distress. Bottling up emotions can lead to increased stress and anxiety. By expressing their feelings, children can release built-up tension and reduce stress levels. When children express their emotions, they become more aware of what they are feeling. This awareness helps them understand themselves better and develop emotional intelligence. This encourages children to communicate their feelings to others. This helps them learn how to articulate their emotions effectively, which is an essential skill for building healthy relationships.

Expressing emotions provides an outlet for children to cope up with challenging situations. Instead

of expressing unhealthy coping mechanisms like aggression or avoidance, they learn to express their feelings in a healthy constructive manner. When children express their emotions, they become more empathetic towards others who may be experiencing similar feelings. This fosters compassion and understanding in their relationships with peers and adults.

Children made spin wheels that have two layers of emotions written on them, which they use to understand what behaviors manifest as emotions.

For example, Love is manifested by acceptance, being affectionate, being gentle and fear is manifested by being embarrassed, rejected, vulnerable, etc.

All the children actively participated in the activities. They were excited to draw the emojis and learned the names of the emotions easily. They also displayed in the classroom like wall hangings and practiced identifying emotions by discussing the incident.

Worksheets were given by the teacher to assess the child's learning process. The children learned about various emotions in different children, thus acknowledging the differences and understanding the reason behind the actions of their peers. This way, they will learn to respect each other, be non-judgmental, and develop self-awareness. It will provide them a sense of safety and a gesture of warmth that despite their differences they are accepted by others. This eventually creates an environment where children can learn with ease.

#### **Listening to positive affirmations and writing on your own:**



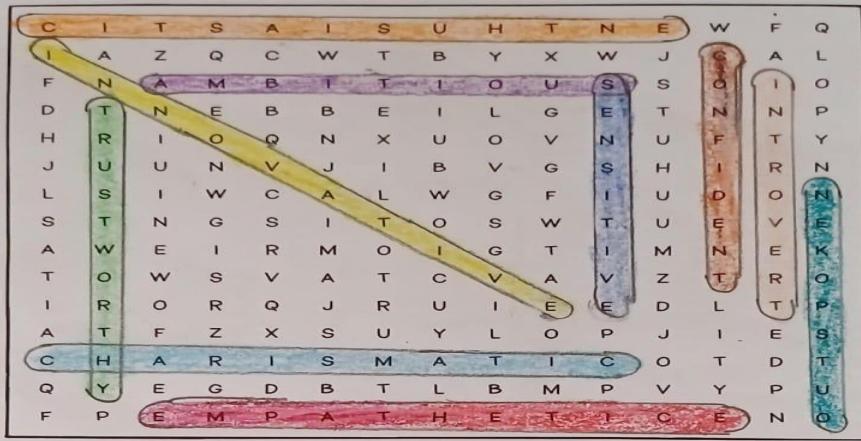


### PERSONALITY ADJECTIVES

Date: 9.1.24

Name: M. Alireza 7-A

FIND 10 PERSONALITY ADJECTIVES. MATCH THEM TO THE DEFINITIONS BELOW.



- Having a strong desire to succeed or achieve something.
- Having a compelling charm that inspires devotion in others.
- Having a firm belief in oneself and one's abilities.
- Having the ability to understand and share the feelings of others.
- Showing great excitement or eagerness.
- Frank and direct in expressing one's opinions and beliefs.
- Being able to come up with new and creative solutions to problems.
- Tending to be reserved and reflective, rather than outgoing.
- Being able to perceive and respond to the needs and feelings of others.
- Being dependable and reliable, worthy of confidence.

Ambition 1  
charismatic 2  
Confident 3  
Empathetic 4  
Enthusiastic 5  
Outspoken 6  
Innovative 7  
Introvert 8  
Sensitive 9  
Trustworthy 10

Affirmations are powerful tools used in self-improvement and personal development. They are positive statements or phrases that individuals repeat to themselves regularly to challenge and overcome self-sabotaging and negative thoughts. By consciously choosing uplifting words and thoughts, affirmations help reprogram the subconscious mind, promoting a mindset of optimism, resilience, and self-belief. Through repetition, affirmations reinforce desired beliefs, attitudes, and behaviors, aligning individuals with their goals.

Building a growth mindset involves learning and moving forward every day. It reduces negative self-talk, improves mood and well-being, and develops higher self-esteem and confidence. Positive thoughts transmit into positive feelings; affirming one's values and abilities. This leads to a positive self-image, recognizing one's capabilities and worth. Reciting positive affirmations can help children interrupt negative thoughts and reprogram their brains to think positively. This helps them avoid defining themselves based on negative self-doubt.

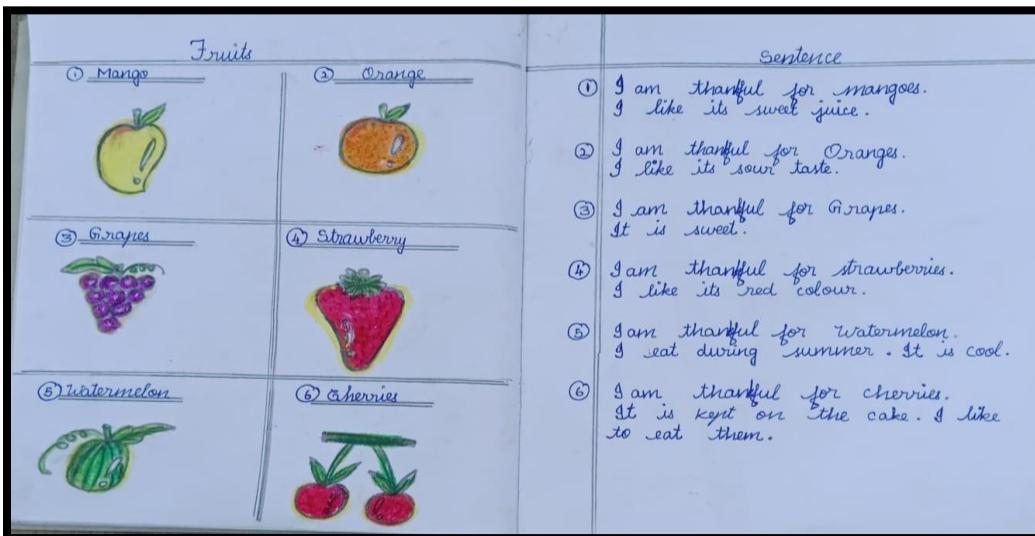
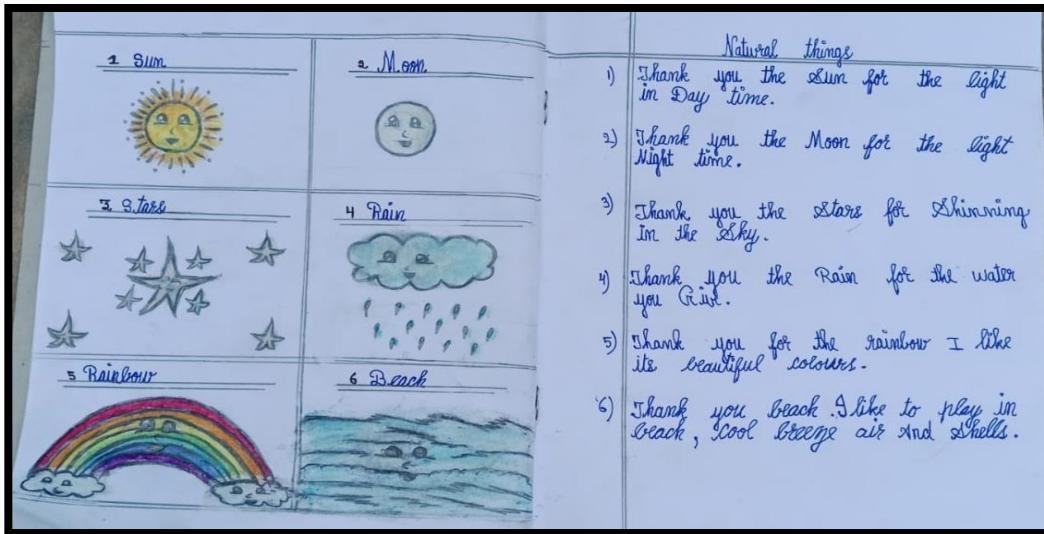
These statements can vary widely, addressing various aspects of life such as self-esteem, relationships, health, and success. Whether written down, spoken aloud, or visualized, affirmations serve as reminders of one's inherent worth, potential, and capacity for growth.

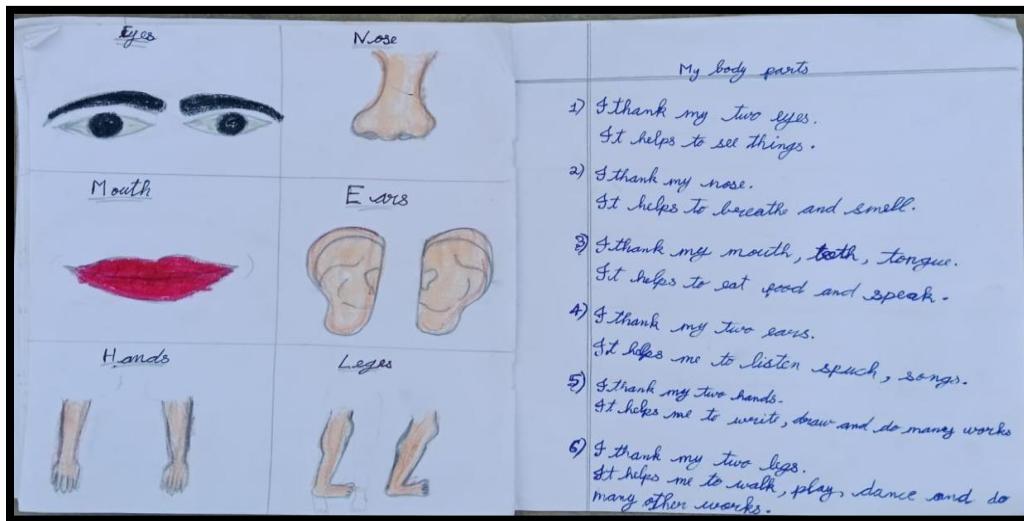
Affirmations can be done silently, visually, reading aloud, or written down. They can be said as needed or as part of a daily routine, such as morning affirmations.

In the greeting time, the teacher played affirmation audio on her mobile or on speakers for the children to listen to. The affirmations can be "I am amazing", "I am kind", etc. The children repeat out loud the affirmations. Following this, the teacher encouraged all the children to write affirmations on their own using relevant adjectives in simple sentences. This enables the child to develop a sense of self-esteem and boosts their confidence.

Worksheets on adjectives were used for assessment by the teacher. Adjectives helped them to frame positive affirmative sentences on their own. Children learned how to refer to a personality and describe one's nature. Affirmations help them to feel good about themselves and strengthen their willpower. Repeatedly listening to affirmations improves pronunciation, vocabulary enrichment, reading, writing, and acquiring the grammatical structures in sentences. The children tend to repeat such affirmations in a setting outside of their classroom, thus expanding their communication skills.

Writing a gratitude list on various themes:





Writing gratitude encourages mindfulness by prompting us to pay attention to the present moment and the blessings in our lives. It helps us cultivate a greater sense of awareness and presence. Practicing gratitude can inspire feelings of generosity and a desire to give back to others. It fosters a sense of interconnectedness and encourages individuals to spread kindness and goodwill. It is a simple yet powerful practice that can have profound effects on our overall well-being and quality of life. It helps us cultivate a positive mindset, reduce stress, strengthen relationships, and foster a greater sense of happiness and fulfillment.

Once a week, the teacher gives a topic and lists out the people or things that the children are feeling grateful for. The topics were listed from what the children encounter in their daily lives, such as relationships, school facilities, helpers, toys, etc. The teacher taught the children to express gratitude to a particular list of people/things. The children will work individually or in groups and display their gratitude list in the classroom. This helps to be a glossary of 150 – 200 words collection of the things in their life. The children try attempting to write short phrases and sentences on their own. The teacher will then help the children translate their expressions from their mother tongue to English. This way the student learns to both express their gratitude and communicate it confidently in English.

Expressions of thanksgiving will enhance the sense of gratitude and support them to focus on what they have and value it. Children started to respect their belongingness and use them wisely. The gratitude glossary enriched their vocabulary and enhanced their communication skill.

**Gratitude tree:**



A gratitude tree is a symbolic representation of the things, people, or experiences for which one

is grateful. It serves as a visual reminder of the blessings in one's life and can be a powerful tool for cultivating a mindset of thankfulness and positivity. The teacher encouraged all the participants to think about things they're grateful for and write them down on the leaves/hands using markers or pens. They can write about anything that brings them joy, whether it's a person, a specific event, a nature sighting, or a personal accomplishment.

The teacher instructed the children to choose topics like family, school, my body, my toys, my house, etc. and from each topic, the child listed out any five things to be grateful for. For example, My school: Teacher, Classroom, Playground, Library, Restrooms.

Once the leaves are filled out, attach them to the tree trunk using adhesive. Arrange them in a visually appealing manner, spreading them out evenly across the branches of the tree. As more leaves are added, the tree becomes fuller and more vibrant, symbolizing the abundance of gratitude in one's life. The participants are encouraged to reflect on the gratitude tree regularly and add more leaves as new things to be grateful for arise. This ongoing practice helps to reinforce the habit of gratitude and keeps the tree ever-growing and evolving.

#### **Creating and sharing greeting cards expressing their feelings:**



Children made cards that read "please", "sorry", and "thank you", and were encouraged to

express their gratitude and regret. The teacher encouraged children to create and share greeting cards to express their feelings of love, compassion, gratitude, regret, and guilt to their friends and family. She facilitates the children to use appropriate words related to the context and decorate the cards using craft and drawing skills.

By expressing their feelings, the children will improve their writing and comprehension skills. This will motivate them to read and write effectively. Expressing their feelings and emotions in a written form will guide them to manage and rebuild their mindfulness. Additionally, by using their craft and drawing skills, the students will develop their creativity and artistic expression.

### Inquiry-based learning:

24.1.24

S.PAKSHAN  
II A

**The Little Bully**

Can you tell the difference between a **bully** and a **buddy**?  
Choose the sentence boxes below into either the bully or buddy column.

|  BUDDY  |  BULLY?  |
|--|---|
| <p>Takes turns and shares</p> <p>Includes everyone</p> <p>Uses polite words</p> <p>Helps other people</p>  | <p>Pushes, hits or trips others up</p> <p>Laughs when others mess up</p> <p>Hurts your feelings on purpose</p> <p>Calls you names</p> |
|  Pushes, hits or trips others up<br> Laughs when others mess up<br> Takes turns and shares<br> Includes everyone |   |
|  Hurts your feelings on purpose<br> Calls you names<br> Uses polite words<br> Helps other people                 |   |

Choose an appropriate answer for the following:

| Sl.no | Bullying Survey  | Yes | No |
|-------|--|-----|----|
| 1     | Has anyone called you names?                                       | —   | No |
| 2     | Have you been teased about what you look like?                     | Yes | —  |
| 3     | Have you been pushed or pinched by anyone on purpose?              | Yes | —  |
| 4     | Do you feel not included by kids in groups?                        | —   | No |
| 5     | Are you afraid to tell to parent/teacher when you've been bullied? | —   | No |

Inquiry-based learning in elementary grades is an approach to education where students are actively engaged in the process of exploration, investigation, and discovery. Instead of simply receiving information from a teacher, students are encouraged to ask questions, explore topics, and seek answers through hands-on activities, research, and critical thinking. It empowers students to take ownership of their education, develop important skills, and become independent thinkers and problem solvers.

The teacher read poems and narrated stories taken from textbooks and life incidents. They discussed the character sketch, emotions, morals, and ending of the story in groups. Children analyze and list out the things that they learned from the story and highlight what they need to know. Children brainstormed to express their opinions on the conclusion of the story, to find a solution to a question, and different ways of concluding the story in simple words/phrases. The teacher will give templates and model phrases to guide the children.

In brainstorming sessions, children are given prompts, which they discuss in groups and form answers. For example: the prompts and discussions are as follows: What is a true friend? A true friend will be there in all situations to support and encourage. What does it mean to be a good friend? One who supports and helps in difficult times. How to support a friend when he/she makes a mistake? It will explain and make him understand the mistake and correct it.

Other activities include a comparative worksheet for Buddy or Bully, writing down their goals in the SMART goals format, and reflection journals. Assessments were done through worksheets based on story sequence, discussions on a bully, reflections, and descriptive writing in simple sentences/phrases.

## **OUTCOMES:**

- Children acquired Social-Emotional skills along with the foundational English literacy skills expected in Grade 5 without the additional burden of learning it as a separate task.
- Children developed an interest in expressing their ideas/views in the English language without fear or hesitation.
- Children with special learning needs participated actively in classroom academic activities with support and encouragement.
- Children learned to acknowledge differences among their peers, a sense of gratitude, and self-acceptance which helped them to be more confident.

- Children improved soft skills and Emotional Intelligence through group activities. This will help them put forth their skills both individually and as a group.
- Children enhanced their creativity, which would lead them to better expression of their thoughts and feelings, and thus communicate more effectively.
- Children developed empathy and were able to connect the dots between various situations. This will set the stage for them to improve their memory and aptitude.
- Children developed qualities of self-regulation, turn-taking, and learning from correcting mistakes through group activities and stories that they apply to their lives.
- Children's imaginations and critical thinking improved, as they were encouraged to work on creative projects. The discussion of the moral of the stories helped them identify similar circumstances in their life and apply the morals accordingly, thus improving their empathy.

### **CONCLUSION:**

The integration of social-emotional learning (SEL) in primary classrooms is very essential for the holistic development of young learners. By prioritizing SEL, teachers not only equip students with essential life skills but also cultivate positive classroom climates that nurture empathy, resilience, and a sense of belonging.

SEL serves as the cornerstone of a supportive and inclusive learning environment. By promoting SEL, teachers empower students to navigate their emotions effectively and build meaningful relationships with peers. Through the cultivation of these competencies, children develop a deeper understanding of themselves and others, fostering empathy and compassion in their interactions.

The benefits of SEL extend far beyond the classroom walls, impacting students' academic achievement, as students exhibit greater focus, motivation, and perseverance in their studies. By equipping children with the necessary socio-emotional skills, teachers lay the foundation for lifelong learning and personal growth. Effective implementation of SEL is developed by a comprehensive approach that integrates evidence-based practices into everyday teaching and learning. By creating opportunities for meaningful dialogue, cooperative learning, and collaborative problem-solving, teachers can foster a culture of respect, empathy, and resilience in their classrooms.

The New Education Policy (2020) places Social Emotional Learning ( SEL ) on equal footing with Foundational Literacy and Numeracy ( FLN ). It enhances critical thinking by focusing on experiential learning. Integrating Social Emotional Learning into the classroom is a holistic approach where there is no rigid separation between curricular and extracurricular activities. It will be beneficial to the student in the long run.

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## **Impact of Smartphone Overuse on Sleep Quality among Young Adults**

**Mr. Sarjerao Namdeo Darekar**

Assistant professor

N.V.P. Mandal's Arts, Commerce  
and Science College Lasalgaon.  
Affiliated to SPPU, Pune

**Ms. Sonali Dilip Pawar**

Assistant professor

N.V.P. Mandal's Arts, Commerce  
and Science College Lasalgaon  
Affiliated to SPPU, Pune

### **ABSTRACT**

The rapid growth of smartphone usage has transformed the lifestyle of young adults across the world. While smartphones provide connectivity, entertainment, and information access, their excessive use has also raised concerns about health, particularly sleep quality. This study aims to examine the relationship between smartphone overuse and sleep quality among young adults aged 18–25. Using the Pittsburgh Sleep Quality Index (PSQI) and a self-reported smartphone usage questionnaire, data will be collected from 120 participants. It is hypothesized that excessive smartphone usage, particularly before bedtime, negatively affects sleep latency, duration, and overall quality. Findings from this study are expected to provide insights into the role of technology in sleep disturbances and suggest preventive measures for healthier sleep hygiene.

**Keywords:** Smartphone Overuse, Sleep Quality.

### **INTRODUCTION**

Smartphones have become an integral part of modern life. According to recent statistics, over 80% of young adults use smartphones for more than four hours daily, often during late-night hours. The attraction of social networking, video streaming, gaming, and instant messaging encourages prolonged screen exposure.

However, evidence suggests that excessive screen time, especially before bedtime, disrupts circadian rhythm, delays melatonin secretion, and increases arousal levels, leading to poor sleep

quality. Sleep is a critical factor for cognitive performance, emotional regulation, and physical well-being. Poor sleep, when persistent, can contribute to anxiety, depression, obesity, and impaired academic performance.

The present study focuses on young adults (college students) as they are particularly vulnerable to smartphone overuse and irregular sleep schedules. By exploring the link between smartphone overuse and sleep quality, the study seeks to highlight an emerging mental health challenge in India and globally.

## **LITERATURE REVIEW**

Smartphone overuse has become a critical concern in sleep research, with multiple studies showing that late-night use negatively affects sleep quality, duration, and efficiency.

### **Early Research**

**Thomee et al. (2011)** in Sweden found that frequent late-night mobile use predicted sleep disturbance, stress, and depressive symptoms, with stronger effects among females. Similarly,

**Muneyzawa et al. (2011)** surveyed 95,000 Japanese adolescents and reported that texting after lights-out was strongly linked to insomnia and daytime fatigue, with heavy texters nearly twice as likely to have poor sleep.

### **Sleep Latency and Circadian Rhythm**

**Exelmans and Van den Bulck (2016)** showed that bedtime smartphone use delayed sleep onset more than total daily use.

**Li et al. (2019)** provided experimental evidence that blue light exposure suppressed melatonin and increased sleep latency.

**while Harada et al. (2019)** highlighted that late-night social networking increased bedtime procrastination and reduced sleep efficiency.

### **Smartphone Addiction and Psychological Mechanisms**

**Gupta and Sharma (2022)** found that students using smartphones for more than five hours daily scored poorly on PSQI, with academic pressure amplifying effects.

**Kohli and Pattanayak (2020)** reported that 72% of Delhi students used phones in bed, reflecting cultural habits of late-night study and networking.

**Kushlev et al. (2020)** demonstrated that reducing daily use by just one hour improved sleep and mood, proving smartphone overuse is modifiable. Lo et al. (2016) emphasized the role of FoMO and compulsive checking, which increased cognitive arousal and delayed sleep.

**Samaha and Hawi (2016)** highlighted that individuals who constantly checked their devices due to FOMO experienced increased cognitive activity, which in turn delayed the onset of sleep.

**Sharma et al. (2021)** observed a dose response effect, with medical students using phones over six hours having 2.5 times greater odds of poor sleep.

### **Emerging Themes**

Overall, three mechanisms stand out:

1. **Biological** – Blue light disrupts circadian rhythm and delays melatonin release (Li et al., 2019).
2. **Psychological** – FoMO and compulsive checking maintain wakefulness (Lo et al., 2016).
3. **Sociocultural** – Academic stress and peer culture worsen the problem in India (Gupta & Sharma, 2022).

Most evidence is cross-sectional, with limited focus on long-term health outcomes or sociocultural factors in the Indian context.

The present study addresses these gaps by examining smartphone overuse and sleep quality among Indian young adults (18–25), focusing on sleep latency, total duration, and overall sleep quality.

### **OBJECTIVES OF THE STUDY**

1. To investigate how excessive smartphone use is associated with the sleep quality of young adults.

2. To assess whether smartphone use before bedtime affects sleep latency and total sleep duration.
3. To compare sleep quality between high smartphone users and moderate users.

### **HYPOTHESES OF THE STUDY**

1. H1: There will be a significant negative correlation between smartphone overuse and sleep quality.
2. H2: Young adults who overuse smartphones before bedtime will report longer sleep latency, shorter total sleep duration, and poorer overall sleep quality.
3. H3: High smartphone users will show significantly poorer sleep quality compared to moderate users.
4. H4: Excessive nighttime smartphone usage will be associated with higher levels of daytime fatigue and reduced concentration.

### **METHODOLOGY**

#### **SAMPLE**

The study will include young adults aged 18 to 25 years, with a sample size of approximately 120 participants selected through a convenience sampling method from colleges and universities. Participants will be categorized into two groups based on their level of smartphone usage: excessive users (individuals who spend more than 6 hours per day on smartphones, particularly during late-night hours) and moderate users (individuals who spend 3–4 hours per day on smartphones with limited use before bedtime). Both male and female participants will be included in the study.

#### **RESEARCH DESIGN**

The study will employ a correlational research design to investigate the relationship between smartphone overuse and sleep quality, and a comparative research design to examine the differences between excessive smartphone users and moderate users.

## TOOLS

- Pittsburgh Sleep Quality Index (PSQI):** Measures subjective sleep quality, sleep latency, sleep duration, and disturbances.
- Smartphone Usage Questionnaire:** Designed to assess average daily screen time, frequency of late-night use, and purpose (social media, gaming, study, entertainment).
- Demographic Form:** Age, gender, academic background, lifestyle habits.

## PROCEDURE

Participants were recruited through a convenience sampling method from colleges and universities. After obtaining informed consent, they were asked to complete the research questionnaires, which took approximately 30 minutes to finish. Upon completion of data collection, the responses were compiled and subjected to statistical analysis.

## DATA ANALYSIS

Pearson's correlation was used to examine relationships between variables, while independent samples t-tests were conducted to test the study's hypotheses.

## RESULTS

**Table 1. Correlation between Smartphone Use and Sleep Quality (PSQI Scores)**

| Smartphone Use Measure                  | Correlation with Sleep Quality (PSQI) (r) | p-value |
|---|---|---------|
| <b>Daily smartphone use (hours)</b>     | -0.48                                     | <0.01   |
| <b>Nighttime smartphone use (hours)</b> | -0.44                                     | <0.01   |
| <b>Late-night use (per week)</b>        | -0.39                                     | <0.05   |

Interpretation: Higher smartphone use (daily, nighttime, and late-night) was significantly associated with poorer sleep quality. (Supports H1).

**Table 2. Effect of Bedtime Smartphone Use on Sleep Latency and Duration**

| Sleep Variable       | Group                   | M ± SD     | t(df)     | p-value |
|----------------------|-------------------------|------------|-----------|---------|
| Sleep Latency (min)  | High bedtime use (n=60) | 38.2 ± 8.7 | 6.95(118) | <0.01   |
| Sleep Latency (min)  | Low bedtime use (n=60)  | 28.4 ± 6.6 |           |         |
| Sleep Duration (hrs) | High bedtime use (n=60) | 5.9 ± 0.9  | 5.78(118) | <0.01   |
| Sleep Duration (hrs) | Low bedtime use (n=60)  | 6.8 ± 0.8  |           |         |

Interpretation: Participants with high bedtime smartphone use had significantly longer sleep latency and shorter sleep duration. (Supports H2).

**Table 3. Comparison of Sleep Quality between High and Moderate Smartphone Users**

| Group                 | Sleep Quality (PSQI Global Score) M ± SD | t(df)     | p-value |
|-----------------------|--|-----------|---------|
| High users (n=60)     | 9.2 ± 2.1                                | 6.83(118) | <0.001  |
| Moderate users (n=60) | 6.7 ± 1.9                                |           |         |

Interpretation: High smartphone users had significantly poorer sleep quality compared to moderate users. (Supports H3).

**Table 4. Association of Nighttime Smartphone Use with Daytime Fatigue and Concentration**

| Smartphone Use Factor           | Association | r     | p-value |
|---------------------------------|-------------|-------|---------|
| Nighttime use & Daytime fatigue | Positive    | 0.42  | <0.01   |
| Nighttime use & Concentration   | Negative    | -0.37 | <0.01   |

Interpretation: Nighttime smartphone use was positively associated with daytime fatigue and negatively associated with concentration levels. (Supports H5).

## DISCUSSION

The present study demonstrated that smartphone overuse is strongly associated with poor sleep quality among young adults. Significant negative correlations were found between daily, nighttime, and late-night smartphone use and sleep quality scores, supporting H1. These findings are consistent with prior research suggesting that prolonged screen exposure interferes with circadian rhythms and sleep efficiency (Demirci, Akgönül, & Akpinar, 2015; Chang et al., 2015). In line with H2, participants who frequently used smartphones at bedtime reported longer sleep latency and shorter sleep duration compared to those with lower bedtime use. Similar results were

reported by Levenson et al. (2017) and Exelmans and Van den Bulck (2016), who found that late-night smartphone engagement delays sleep onset and reduces restorative rest. Furthermore, the comparison between high and moderate smartphone users supported H3, with high users showing significantly poorer overall sleep quality. This echoes Samaha and Hawi's (2016) findings that smartphone addiction predicts impaired sleep.

Finally, consistent with H4, nighttime smartphone use was positively associated with daytime fatigue and negatively with concentration, reinforcing evidence from Thomée et al. (2011). These results highlight that the effects of smartphone overuse extend beyond sleep, impairing daily functioning and academic performance. Overall, the findings provide strong evidence that nighttime smartphone use is a key risk factor for poor sleep quality and reduced well-being among young adults.

## CONCLUSION

This study demonstrates that excessive smartphone use, particularly during nighttime and before bedtime, significantly disrupts sleep quality in young adults. Consistent with the hypotheses, greater smartphone use was associated with poorer sleep quality, increased sleep latency, reduced sleep duration, and heightened daytime fatigue, alongside decreased concentration. These results align with prior research indicating that prolonged screen exposure and late night engagement interfere with circadian rhythms and sleep efficiency (Chang et al., 2015; Demirci et al., 2015; Exelmans & Van den Bulck, 2016).

The findings underscore the importance of promoting healthier digital practices to safeguard sleep health. Practical measures such as digital curfews, limiting late-night screen time, and incorporating relaxation strategies before sleep may reduce the negative effects of smartphone overuse. Given that poor sleep impairs cognitive performance, academic success, and psychological well-being, targeted awareness programs for students and young adults are recommended. Future research should employ longitudinal and intervention-based designs to establish causality and identify effective strategies for mitigating the impact of smartphone overuse on sleep.

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## Gender Differences in social Adjustment during Late Adolescence

Neha Raza

Patna District Bihar.

### ABSTRACT

The present study examined gender differences in social adjustment among late adolescents, focusing on four dimensions: social interaction, peer relationships, cooperation, and participation in group activities. A sample of 100 undergraduate students (50 males and 50 females) aged 18–21 years was selected using a two-stage sampling technique from colleges in Patna. Data were collected through the Social Adjustment Inventory (SAI) developed by Pal (1983). Statistical analysis was carried out using mean, standard deviation, and t-test. Results revealed significant gender differences across all dimensions of social adjustment. Male late adolescents demonstrated higher levels of social interaction, peer relationships, cooperation, and participation in group activities compared to their female counterparts.

**Keywords:** - social adjustment, social interaction, late adolescence, peer relationships, cooperation, group participation

### INTRODUCTION

and social transitions. Within this period, late adolescence (18–21 years) is particularly important, as it marks the bridge between dependency and adulthood. During this stage, individuals face critical developmental tasks, such as gaining autonomy, preparing for careers, and establishing mature interpersonal relationships. Among the various psychological constructs that influence this process, social adjustment plays a central role. Social adjustment refers to the ability to adapt effectively to social expectations, manage interpersonal demands, and maintain psychological well-being while engaging with family, peers, institutions, and society at large (Schneider, 1964). One of the most significant factors shaping patterns of social adjustment during late adolescence is gender. Socialization processes, cultural norms, and gender expectations create distinct pathways for male and female adolescents, leading to notable differences across multiple dimensions of adjustment. These differences can be observed clearly in four major domains: social

interaction, peer relationships, cooperation, and participation in group activities.

### **1. Social Interaction**

Male late adolescents typically demonstrate higher levels of social interaction compared to females. They are often encouraged to express independence, assertiveness, and confidence in group settings (Arnett, 2000). Their friendships frequently revolve around shared activities, sports, or group belonging, which enhances their willingness to initiate and sustain interactions in larger social networks (Berndt, 2002). This activity-based orientation fosters resilience and helps males adapt in collective settings. Female late adolescents tend to be more relationally oriented, prioritizing emotional expression, empathy, and intimacy within smaller, close-knit groups (Rose & Rudolph, 2006). While this facilitates deeper interpersonal bonds, it may also restrict their willingness to participate in broader social networks. Females may experience social anxiety, relational stress, or hesitation in competitive group environments, which influences their overall level of social interaction.

### **2. Peer Relationships**

Peer relationships are a central aspect of social adjustment in adolescence. Males often build peer connections based on shared goals, activities, and group belonging, which supports a sense of identity and collective participation. Their peer groups often encourage competitiveness, leadership, and risk-taking, which may enhance self-confidence but sometimes lead to externalizing behaviors such as aggression or rule-breaking (Leadbeater et al., 1999). Female adolescents, on the other hand, typically invest more in emotionally intimate and supportive peer relationships. They demonstrate greater sensitivity, self-disclosure, and relational empathy (Rose & Rudolph, 2006). Such qualities allow them to manage friendships with a strong emotional foundation, yet also make them more vulnerable to relational conflicts, peer rejection, and pressures regarding body image and conformity (Nair & Duvvury, 2015). Thus, while females excel in depth of connection, males are more active in breadth of peer interaction.

### **3. Cooperation**

In terms of cooperation, male late adolescents often show higher levels of collaborative engagement in task-oriented settings, particularly when activities involve teamwork, problem-solving, or leadership roles. Their tendency to bond through group tasks and collective achievements fosters cooperative skills in structured environments, such as sports or academic projects. This aligns with societal expectations that encourage males to demonstrate leadership and

responsibility. Female late adolescents, however, approach cooperation through an interpersonal lens, emphasizing support, conflict resolution, and maintaining harmony within smaller groups. Their cooperative strategies are grounded in empathy and relational balance, making them effective in nurturing environments but sometimes less visible in competitive or large-scale group activities.

#### **4. Participation in Group Activities**

Male late adolescents generally exhibit significantly higher levels of participation in group activities compared to females. Their preference for activity-based friendships and encouragement toward independence and leadership often results in active involvement in sports, clubs, or peer-led initiatives (Berndt, 2002). Participation in such activities enhances their social visibility, leadership potential, and adaptability in collective environments. Female late adolescents, while highly engaged in dyadic or small-group interactions, may be less active in larger group activities. Cultural and societal expectations often shape their involvement, with emphasis placed on academic responsibilities, family obligations, or socially approved behaviors (Nair & Duvvury, 2015). Although they may participate in structured activities, their engagement tends to be more selective and influenced by relational comfort rather than competitive or group-based demands. Gender differences in social adjustment during late adolescence are evident across the four dimensions of social interaction, peer relationships, cooperation, and participation in group activities. Males tend to be more activity-driven, socially assertive, and group-oriented, which supports higher engagement in collective tasks but also exposes them to externalizing risks. Females emphasize emotional intimacy, empathy, and relational depth, which strengthens interpersonal bonds but may limit broader social participation and increase vulnerability to relational stress. These contrasting patterns highlight the importance of understanding gender-specific strengths and challenges in social adjustment, particularly within cultural contexts such as India where traditional gender roles continue to influence adolescent development. By exploring these differences, researchers, educators, and policymakers can design interventions that foster resilience, emotional well-being, and balanced adjustment strategies for both male and female late adolescents.

#### **REVIEW OF RELATED LITERATURE**

**Bansal and Choudhary (2006)** found that male college students in India were more socially active, particularly in sports and group settings, while females preferred smaller, supportive

circles. **Bhatia and Bhatia (2012)** confirmed that boys participate more in group activities, supported by cultural reinforcement of independence and visibility. **Bussey and Bandura (1999)** argued that gender roles are learned through reinforcement, with boys encouraged toward assertiveness and independence, and girls toward relational sensitivity. **Maccoby (1998)** further emphasized that these patterns activity-based interactions for males and relational styles for females are consistent across developmental stages. **Gupta and Singh (2009)** further observed that male adolescents scored higher on assertiveness and confidence in social situations, reflecting cooperative roles in leadership contexts, while females demonstrated hesitation linked to relational norms. **Leadbeater, Kuperminc, Blatt, and Hertzog (1999)** this study observed that males often rely on activity-based peer groups that encourage competitiveness but also risk externalizing behaviors, while females' empathetic and supportive ties increase the risk of relational stress. **Mehta (2010)** supported this distinction, finding that girls were more sensitive to peer rejection, whereas boys externalized conflicts through aggression or withdrawal. **Nair and Duvvury (2015)** emphasized that Indian girls' social adjustment is often restricted by societal norms around modesty and family reputation, while boys enjoy greater freedom and peer mobility. **Pal (1985)**, through the development of the Social Adjustment Inventory (SAI), demonstrated that males consistently scored higher on group participation and interaction, while females scored higher on cooperation. **Patil and Sutar (2013)** found that girls in Maharashtra emphasized empathy and conflict resolution, whereas boys displayed greater cooperation in structured, competitive environments such as sports or academic projects. **Rani (2011)** observed that female adolescents often face greater pressure to balance emotional maturity and family responsibilities, while males are encouraged toward assertiveness and career preparation. **Rao (2005)** found that female adolescents reported greater intimacy, trust, and self-disclosure in friendships, while males emphasized companionship through shared activities. **Rose and Rudolph (2006)** confirmed that girls display more emotional expressiveness and co-rumination, fostering intimacy but increasing vulnerability to internalizing problems such as anxiety and depression. **Sharma (1992)**, who observed higher scores for males on social interaction, whereas females excelled in relational sensitivity. **Shinde (2016)** reinforced these findings, noting that boys were more cooperative in goal-oriented tasks, while girls emphasized interpersonal harmony. **Valkenburg and Peter (2011)** found that females primarily use social media for relational communication and emotional support, making them more vulnerable to cyberbullying and body image issues. Males, however, use online

platforms for entertainment and competitive activities, which may encourage risk-taking or aggression. **Verma (2008)** also noted that male adolescents were more engaged in extracurricular and outdoor activities, while female participation was constrained by family and cultural expectations. **Verma (2008) and Bansal and Choudhary (2006)** both documented males' higher engagement in group activities, particularly sports, whereas females' participation was often constrained by cultural and safety concerns. **Wentzel (2003)** reported that female adolescents demonstrated higher empathy and prosocial behavior, fostering harmony in small groups.

### STATEMENT OF THE PROBLEM

Late adolescence is a critical stage marked by significant social, emotional, and psychological changes. Social adjustment during this phase plays an essential role in shaping personality, peer bonding, and overall well-being. However, gender differences often influence the ways adolescents interact, cooperate, and participate in group activities. In many cultural contexts, males are encouraged toward independence and group participation, whereas females may face more restrictions in social interactions. Such differences can create variations in adjustment patterns. Therefore, the present study aims to investigate gender differences in social adjustment among late adolescents.

### OBJECTIVE OF THE STUDY

- “To examine gender differences in social adjustment across the dimensions of social interaction, peer relationships, cooperation, and participation in group activities among late adolescents.”

### HYPOTHESIS OF THE STUDY

- There is no significant gender difference in social adjustment across the dimensions of social interaction, peer relationships, cooperation, and participation in group activities among late adolescents.

### METHODS

#### SAMPLE:

The study will comprise 100 late adolescents (50 males and 50 females) aged 18–21 years, selected from UG colleges in Patna City in Bihar. A two-stage sampling technique will be employed: in the

first stage, 4–6 institutions representing both urban and rural areas will be selected, and in the second stage, quota sampling will be used to ensure equal gender representation within each institution.

### **RESEARCH DESIGN: -**

The present study simple research design was used.

### **VARIABLES USED FOR STUDY**

- **Independent variable: Gender-** 1) Male late adolescents 2) Female late adolescents
- **Dependent variables: social adjustment-** (1) Social interaction, (2) Peer relationships (3) Cooperation, (4) Participation in group activities.

### **RESEARCH TOOLS: -**

#### **Social Adjustment Inventory**

The Social Adjustment Inventory (SAI), developed by Dr. Roma Pal (1983), is a standardized instrument designed to assess the level of social adjustment among adolescents and adults. The inventory contains 90 items that measure four important areas of adjustment: social interaction, peer relationships, cooperation, and participation in group activities. It is a self-report tool in which respondents provide answers in a simple Yes/No or Agree/Disagree format. Scoring is based on assigning 1 point to socially desirable responses and 0 to undesirable responses, with certain items reverse scored. Higher scores indicate better adjustment, while lower scores suggest difficulties in adjustment. The inventory has demonstrated high reliability (above 0.70) and satisfactory validity.

### **PROCEDURES OF DATA COLLECTION:**

The data for this study will be collected in a systematic and ethical manner. Permission will first be obtained from the principals of selected higher secondary schools and junior colleges in Patna. A two-stage sampling procedure will be followed to select participants, ensuring representation from both urban and rural areas and equal numbers of male and female students. Participants will be informed about the purpose of the study, and written informed consent will be obtained; for minors, parental consent will also be secured. The Social Adjustment Inventory (SAI) by Dr. Roma Pal, 1983 will be administered to assess social interaction, peer relationships, cooperation, and participation in group activities. Clear instructions will be given, and sufficient time will be provided for completion.

## STATISTICAL TREATMENT:

At the first stage data were treated by descriptive statistical techniques i.e. mean and standard Deviation and t value was done by using SPSS Software.

## RESULTS AND DISCUSSION

**Table No. 01**  
**Summary and Results of descriptive statistical showing the Gender between Social Adjustment**

| Table No.        | Factor                            | Geder                   | Mean  | SD   | N  | DF | 't' Value | Sign. |
|------------------|-----------------------------------|-------------------------|-------|------|----|----|-----------|-------|
| Table No. 01 (A) | Social Interaction                | Male Late Adolescents   | 16.20 | 1.20 | 50 | 98 | 6.10      | 0.01  |
|                  |                                   | Female Late Adolescents | 14.50 | 1.50 | 50 |    |           |       |
| Table No. 01 (B) | Peer Relationships                | Male Late Adolescents   | 16.00 | 1.25 | 50 | 98 | 5.80      | 0.01  |
|                  |                                   | Female Late Adolescents | 14.30 | 1.55 | 50 |    |           |       |
| Table No. 01 (C) | Cooperation                       | Male Late Adolescents   | 16.30 | 1.10 | 50 | 98 | 6.50      | 0.01  |
|                  |                                   | Female Late Adolescents | 14.60 | 1.45 | 50 |    |           |       |
| Table No. 01 (D) | Participation in Group Activities | Male Late Adolescents   | 16.10 | 1.20 | 50 | 98 | 6.00      | 0.01  |
|                  |                                   | Female Late Adolescents | 14.40 | 1.50 | 50 |    |           |       |

### Social Interaction

#### Hypothesis-01

- There is no significant gender difference in social adjustment across the dimensions of social interaction among late adolescents.

Observation of Table No. 01(A) reveals that the mean Social Interaction scores differ between the two gender groups. Male late adolescents obtained a mean score of 16.20 (SD = 1.20), whereas female late adolescents obtained a mean score of 14.50 (SD = 1.50). The calculated *t*-value was 6.10, which is statistically significant at the 0.01 level (*t* (98) = 6.10, *p* < 0.01). This indicates that the obtained *t*-value exceeds the critical value at the 0.01 level of significance. Hence, the null hypothesis is rejected, and the alternative hypothesis is accepted. The results suggest that male late adolescents demonstrate significantly higher levels of social interaction compared to their female

late adolescents.

The present study highlights a significant gender difference in social interaction among late adolescents, with males reporting higher levels than females. This indicates that gender plays a vital role in shaping social behavior and adjustment during adolescence. One explanation lies in traditional gender roles, where boys are often encouraged to engage in peer groups, outdoor activities, and broader social networks, thereby enhancing their interaction skills (Reddy & Sharma, 2019). In contrast, girls are frequently socialized toward modesty, compliance, and family-centered responsibilities, which may limit their opportunities for wider social participation (Nanda, 2017).

These findings align with earlier research showing that male adolescents tend to be more socially outgoing and group-oriented, whereas females often display stronger emotional closeness in smaller circles (Singh & Kaur, 2016; Verma & Bhatt, 2018). From a developmental perspective, Erikson's psychosocial theory emphasizes adolescence as a stage of identity formation, where social interaction plays a key role (Erikson, 1968). Males may seek wider peer affiliations for independence and recognition, while females prioritize close emotional bonds (Maccoby, 1998). Moreover, cultural factors in collectivist societies like India reinforce these patterns. Parental monitoring often restricts girls' social exposure compared to boys (Mishra & Kumar, 2020).

### **Peer Relationships**

#### **Hypothesis-02**

- There is no significant gender difference in social adjustment across the dimensions of peer relationships among late adolescents.

Observation of Table No. 01(B) indicates that the mean Peer Relationship scores vary between the two gender groups. Male late adolescents reported a mean score of 16.00 (SD = 1.25), while female late adolescents reported a lower mean score of 14.30 (SD = 1.55). The calculated t-value of 6.10 was found to be statistically significant at the 0.01 level ( $t(98) = 5.80, p < 0.01$ ). Since the obtained t-value exceeds the critical value, the null hypothesis is rejected, and the alternative hypothesis is accepted. These findings suggest that male late adolescents exhibit significantly higher levels of Peer Relationships compared to their female late adolescents.

The present study found significant gender differences in peer relationships among late adolescents, with males reporting higher levels than females. This indicates that gender is an important factor influencing social connectedness during adolescence. Peer relationships are

central to adolescent development, shaping identity, self-esteem, and social adjustment (Brown & Larson, 2009). The higher scores among males may be explained by traditional gender roles, where boys are encouraged to engage in outdoor activities, sports, and larger peer groups, fostering stronger peer bonds (Reddy & Sharma, 2019). In contrast, girls are often guided toward family-oriented responsibilities and face stricter parental monitoring, which can limit wider peer involvement (Nanda, 2017).

These findings are consistent with previous research, which highlights that boys are generally more group-oriented and socially assertive, while girls tend to form smaller, emotionally intimate peer groups (Singh & Kaur, 2016; Maccoby, 1998). From Erikson's (1968) developmental perspective, adolescence is a critical stage for identity formation, and peer relationships play a vital role. Cultural influences, particularly in collectivist societies like India, further shape these gendered patterns (Mishra & Kumar, 2020).

### **Cooperation**

#### **Hypothesis-03**

- There is no significant gender difference in social adjustment across the dimensions of cooperation among late adolescents.

Observation of Table No. 01(C) indicates that the mean cooperation scores vary significantly between the two gender groups. Male late adolescents obtained a mean score of 16.30 (SD = 1.10), whereas female late adolescents obtained a mean score of 14.60 (SD = 1.45). The computed *t*-value was 6.50, which is statistically significant at the 0.01 level ( $t(98) = 6.50, p < 0.01$ ). This confirms that the obtained *t*-value exceeds the critical value at the 0.01 level of significance. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted. These results suggest that male late adolescents exhibit significantly higher levels of cooperation compared to their female late adolescents.

The present study revealed a significant gender difference in cooperation among late adolescents, with males scoring higher than females. Cooperation, a vital aspect of social adjustment, involves teamwork, sharing responsibilities, and contributing to group tasks (Deutsch, 2011). This difference can be understood through developmental, social, and cultural factors. Boys are often encouraged to participate in group-based and competitive activities, which foster cooperative skills (Maccoby, 1998). In contrast, girls are socialized toward emotionally supportive and relational roles, which shape cooperation in more intimate contexts (Rose & Rudolph, 2006).

These findings align with earlier research. Singh and Kaur (2016) observed that males are more group-oriented, enhancing their cooperative behaviors, while Verma and Bhatt (2018) reported that boys often engage in collective problem-solving and teamwork. From Erikson's (1968) psychosocial perspective, adolescence is a period when peer interaction is central, and males may adopt cooperative strategies to gain peer recognition. Cultural factors in collectivist societies like India also play a role, as boys are encouraged toward leadership and teamwork, whereas girls face greater parental restrictions that limit public group participation (Reddy & Sharma, 2019; Mishra & Kumar, 2020).

### **Participation in Group Activities**

#### **Hypothesis-04**

- There is no significant gender difference in social adjustment across the dimensions of participation in group activities among late adolescents.

Observation of Table No. 01(D) indicates that the mean scores for participation in group activities differ significantly between the two gender groups. Male late adolescents obtained a mean score of 16.30 (SD = 1.10), whereas female late adolescents obtained a mean score of 14.60 (SD = 1.45). The computed *t*-value was 6.50, which is statistically significant at the 0.01 level ( $t(98) = 6.50, p < 0.01$ ). This confirms that the obtained *t*-value exceeds the critical value at the 0.01 level of significance. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted. These findings suggest that male late adolescents exhibit significantly higher levels of participation in group activities compared to their female late adolescents.

The present study revealed a significant gender difference in participation in group activities among late adolescents, with males scoring higher than females. This indicates that boys are more actively engaged in collective tasks and teamwork, which is an important dimension of social adjustment (Deutsch, 2011). A likely explanation lies in gendered socialization, as boys are often encouraged from childhood to participate in outdoor games, sports, and team-based activities that cultivate group participation skills (Maccoby, 1998). Girls, by contrast, are more often directed toward family roles and intimate peer interactions, which may limit their involvement in broader group settings (Rose & Rudolph, 2006).

These findings are consistent with earlier research showing that male adolescents are more inclined toward teamwork and group-based problem solving, while females often prefer dyadic or emotionally supportive interactions (Singh & Kaur, 2016; Verma & Bhatt, 2018). From Erikson's

(1968) developmental perspective, adolescence is a key stage for identity formation, where peer groups play a central role. Boys may seek recognition in larger groups, whereas girls may prioritize closer friendships. Cultural expectations in collectivist societies like India further reinforce these differences, as boys are encouraged to take part in community or school group activities, while girls often face greater restrictions (Mishra & Kumar, 2020).

## CONCLUSION

1. Male late adolescents demonstrated significantly higher levels of social interaction compared to female late adolescents.
2. Male late adolescents exhibited significantly higher levels of peer relationships than their female counterparts.
3. Male late adolescents showed significantly higher levels of cooperation compared to female late adolescents.
4. Male late adolescents reported significantly higher levels of participation in group activities than female late adolescents.

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## **A Comparative Study of Depression and Wellbeing Among Urban and Rural Senior College Students.**

**Dr. Shantilal Dadaji Shewale**

Maharaja Sayajirao Gaikwad

Arts, Science and Commerce College, (Autonomous)

Malegaon-camp. Maharashtra.

### **ABSTRACT**

Depression and wellbeing are critical indicators of mental health among young adults, particularly college students who face academic, social, and personal challenges. This study aims to compare the levels of depression and overall wellbeing among urban and rural college students. A sample of 60 students (30 Urban Students and 30 Rural Students) was assessed using standardized psychological scales. Results indicate that Urban students reported higher levels of depression, whereas rural students showed comparatively better wellbeing. Findings are discussed in relation to lifestyle differences, social support systems, and academic pressures. The implications highlight the need for targeted mental health interventions for both groups.

**Key words-** Depression and wellbeing, urban and rural college students.

### **INTRODUCTION:**

Mental health concerns among college students have become increasingly significant, with depression emerging as a leading issue worldwide. The transition from adolescence to adulthood often coincides with academic stress, financial pressures, and identity formation. However, environmental factors such as urban or rural residence may affect psychological wellbeing differently. Urban students may experience greater exposure to competitive academic environments, social isolation, and lifestyle stressors. In contrast, rural students may benefit from cohesive community structures but may lack access to mental health resources. This research

examines these differences systematically.

**Depression-** Todays Scenario the student faces the problem excessive competition. They are not achieving the things which they have expect. So, they feel depression. Day by day the level of depression is increased in all section of society. It is the one of major health issue in world if it is not solved in right time the it gives adverse effect and sometime cause suicide. Depression is a common yet serious mood disorder characterized by persistent feelings of sadness, hopelessness, and a loss of interest or pleasure in activities that were once enjoyable. It ordinary sadness is not just or a temporary reaction to stress but a clinical condition that affects how a person thinks, feels, behaves, and functioning.

- **1) World Health Organization (WHO, 2021):**

"Depression is a common mental disorder characterized by persistent sadness and a lack of interest or pleasure in previously rewarding or enjoyable activities. It can also disturb sleep and appetite, and lead to tiredness and poor concentration."

- **2) American Psychiatric Association (APA, DSM-5):** "Major Depressive Disorder is defined by the presence of five or more specific symptoms (such as depressed mood, loss of pleasure, changes in weight, insomnia, feelings of worthlessness, and suicidal thoughts) present during the same 2-week period and representing a change from previous functioning."

**3) Wellbeing-** The **well-being of adolescence means** to the overall physical, emotional, mental, and social health of individuals between the ages of 12 to 21years it is a developmental stage full of rapid changes, opportunities, and challenges. Simply wellbeing refers to the quality of people lives including material condition health, education personal activities, social connections and subjective evaluations of life.

Wellbeing is important concept in human life. It is related to various factors such as feel healthy and safe, experience positive emotions, high self-esteem, supportive relationships with others, develop the skill and resilience.

### **Key dimensions of adolescent well-being**

There is various dimension of adolescent well-being:

Physical well-being is related to proper nutrition, sleep and exercise. It is also related to prevention of risky behavior.

- **Emotional and mental well-being is associated to** Stable mood and healthy coping mechanisms, Low levels of anxiety, depression, and loneliness, Positive self-image and self-acceptance.
- Social well-being is associated with family bonds and peer support. It is related to Opportunities to participate in school, sports, arts, and community activities

## **OBJECTIVES OF THE STUDY**

1. To measure and compare depression levels among urban and rural college students.
2. To measure and compare overall wellbeing among urban and rural college students.
3. To explore possible factors contributing to differences in depression and wellbeing.

## **HYPOTHESES OF THE STUDY**

- 1 There is a significant difference in depression levels between Urban College Student and Rural College Students.
- 2 There is a significant difference in wellbeing levels between Urban College Student and Rural College Students.

## **METHODOLOGY:**

### **Sample:**

The sample of present study were consisting of 60 college students (30 urban, 30 rural). The sample was selected from Malegaon Tehsil. The age group of selected samples was 18–21. Simple Random Sampling method was used to select sample.

### **Research Design-**

Simple research design is used for the study.

## Variables-

- **Independent Variable: Living of Area-** 1) Urban Senior College Students  
2) Rural Senior College Students
- **Dependent Variable:** 1) Wellbeing 2) Depression level

## Tools used –

- **Wellbeing Scale –** Philip H. Friedman Constructed Wellbeing Scale Consist of 20 bipolar It usually takes 2-3 minutes to complete. The test reliability of scale 0.91 to 0.96 and Validity 0.61
- **Mental Depression Scale-** Mental Depression Scale is Constructed by L.N. Dubey the scale Consist 50 items. The reliability of test-retest method and Half –split method was found 0.64 and 0.69 and Validity 0.41 and 0.39

## STATISTICAL ANALYSIS

Means, standard deviations, and t-tests were used to analyze differences between groups.

| Group          | Mean Depression Score | SD  | Mean Wellbeing Score | SD  |
|----------------|-----------------------|-----|----------------------|-----|
| Urban Students | 22.5                  | 6.2 | 49.1                 | 9.3 |
| Rural Students | 17.3                  | 5.7 | 56.8                 | 8.7 |

The table indicates that urban college students show higher depression level than rural students. The mean of urban students was 22.5 and SD was 6.2 whereas mean of rural students was 17.3 and SD was 5.7 and Urban students have a lower mean value indicates low well-being and rural students high mean value indicates high well-being.

The findings reveal that urban college students reported higher depression levels than rural students. This could be attributed to higher academic pressure, social competition, and limited face-to-face support networks in cities. Conversely, rural students showed better wellbeing, possibly due to stronger community ties and less exposure to urban stressors.

However, rural students may still face unique challenges such as fewer career opportunities and

limited access to mental health professionals. The results suggest that interventions should be location-sensitive urban colleges may benefit from stress management workshops and counseling centers, while rural colleges should focus on increasing awareness and accessibility of mental health resources.

The study highlights clear differences in depression and wellbeing between urban and rural college students. Addressing these disparities requires tailored interventions that account for environmental, social, and cultural factors. Promoting mental health literacy and providing targeted support can help improve overall student wellbeing.

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- The word "Abstract" is centered and bold at the top of the page.
- Provide a 150–250-word summary of the study.
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- Include Keywords: (Italicized, listed below the abstract).

### **INTRODUCTION**

- Start with a broad introduction to the topic.
- Explain the importance and relevance of the study.
- Define key concepts if necessary.
- Introduce the research problem and its significance.
- Provide relevant background information.

### **➤ REVIEW OF RELATED LITERATURE**

- Summarize previous studies related to the research.
- Identify gaps in literature and explain how the study addresses them.
- Compare different theories and findings.
- Use in-text citations in APA format (e.g., Smith, 2020).

### **STATEMENT OF THE PROBLEM**

- Clearly define the research problem being addressed.

### **OBJECTIVES OF THE STUDY**

- List the specific objectives or goals of the study.

## HYPOTHESES OF THE STUDY

- Present the null and/or alternative hypotheses (if applicable).

## METHODOLOGY

### SAMPLE

- Describe the sample size, demographic details, and selection method.
- Example:
  - "The study included 200 college students (100 males, 100 females) aged 18-24 from XYZ University. Participants were selected through stratified random sampling."

### RESEARCH DESIGN

- Specify the type of research design (e.g., experimental, correlational, survey-based).

### VARIABLES USED IN THE STUDY

- **Independent Variables** – Define the factors being manipulated or categorized.
- **Dependent Variables** – Define the outcomes being measured.

### OPERATIONAL DEFINITIONS

- Provide precise definitions of key terms used in the study.

### RESEARCH TOOLS

- Describe the surveys, tests, or scales used.
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### PROCEDURES OF DATA COLLECTION

- Explain the step-by-step process of data collection.
- Example:
  - "Participants completed an online survey measuring emotional intelligence and stress levels. Data collection lasted for two weeks."

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## RESULTS

- Summarize the key findings.
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## DISCUSSION

- Interpret the meaning of the results.
- Compare findings with previous research.
- Discuss any limitations of the study.
- Suggest future research directions.

## CONCLUSION

- Summarize the main findings.
- Explain the implications of the study.
- Provide recommendations for future research.

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