

Effectiveness of Gratitude Journaling on the Perceived Stress among UPSC Aspirants

Dissertation submitted to the University of Kerala

In partial fulfilment of the requirements for the award of the Degree of

M. Sc. Counselling Psychology

By

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CERTIFICATE

This is to certify that the Dissertation entitled “**Effectiveness of Gratitude Journaling on the Perceived Stress among UPSC Aspirants**” is an authentic work carried out by **S R Siva Priya**, Reg. No.: 60423115017 under the guidance of **Dr. Pramod S.K.** during the fourth semester of M.Sc. Counselling Psychology programme in the academic year **2023-2025**.

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DECLARATION

I, **S R Siva Priya**, do hereby declare that the Dissertation titled “**Effectiveness of Gratitude Journaling on the Perceived Stress among UPSC Aspirants**”, submitted to the Department of Counselling Psychology, Loyola College of Social Sciences (Autonomous), Sreekariyam, under the Supervision of **Dr. Pramod S.K.**, Assistant Professor, Department of Counselling Psychology, for the award of the degree of the Master of Science in Counselling Psychology, is a Bonafide work carried out by me. No part thereof has been submitted for the award of any other degree in any University.

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Table of Contents

List of tables and figures.....	6
Abstract.....	7
Chapter 1 – Introduction.....	8
Statement of the problem.....	11
Need and significance of the study.....	12
Objectives.....	14
Research question.....	14
Hypothesis.....	14
Chapter 2 -Review of literature.....	15
Research gap.....	37
Chapter 3 - Methodology.....	40
Title of the study.....	41
Research design.....	41
Participants.....	41
Sampling method.....	42
Conceptual definitions.....	42
Tool of data collection.....	43
Procedure of data collection.....	45
Data analysis.....	47
Chapter 4 - Results and Discussion.....	50
Quantitative data analysis.....	51
Interpretation.....	57
Qualitative data analysis.....	58
Interpretation.....	63
Discussion.....	65
Chapter 5 – Summary and Conclusion.....	70
Conclusion.....	75
Implications.....	76
Limitations.....	77
Suggestions for further research.....	79
References.....	82
Appendices.....	91

List of tables and figures

Table no.	Name of the table	Page no.
Table 1	Sociodemographic details, pretest, and post scores of the control group	51
Table 2	Sociodemographic details, pretest, and post-test scores of the experimental group	51
Table 3	Descriptive Statistics for Perceived Stress Scores in Both Groups	52
Table 4	Mean Difference and Standard Deviation in Perceived Stress Scores (Pretest – Post-test)	53
Table 5	Mean Difference and Standard Error (Experimental and control group pre–post comparisons)	53
Table 6	Within-group comparison of pretest and post-test Perceived Stress Scale scores	54
Table 7	Statistical significance of stress reduction within each group	54
Table 8	Descriptive comparison of post-test Perceived Stress Scale scores between groups	55
Table 9	Independent Samples t-Test: Post-test Scores Between Experimental and Control Groups	55
Table 10	Summary of Thematic Analysis of Qualitative Feedback	62
Figure 1	Comparison of Pretest and Post-test Scores Between Experimental and Control Groups	56

Abstract

The present study aimed to evaluate the effectiveness of a 15-day gratitude journaling intervention in reducing perceived stress among UPSC aspirants in Kerala and to explore participants' subjective experiences of the intervention. Adopting a mixed-methods quasi-experimental design, the study involved 18 participants selected through purposive and convenience sampling, divided into an experimental group ($n = 9$) and a control group ($n = 9$). The Perceived Stress Scale (PSS-10) was administered pre- and post-intervention. Quantitative analysis revealed a statistically significant reduction in perceived stress in the experimental group ($t(8) = 2.614$, $p = .031$), with no significant change in the control group. Thematic analysis of qualitative feedback from the experimental group highlighted key themes such as emotional upliftment, emotional regulation, self-awareness, perspective shift, and perceived usefulness. These findings suggest that gratitude journaling can be an effective, low-cost psychological strategy to manage stress and enhance emotional well-being among UPSC aspirants.

Keywords: gratitude journaling, perceived stress, UPSC aspirants, mixed-methods, psychological intervention, emotional well-being

Chapter 1

Introduction

Effectiveness of Gratitude Journaling on the Perceived Stress of UPSC Aspirants

The Union Public Service Commission (UPSC) is India's central recruiting body responsible for appointing candidates to the nation's highest civil positions. Among the various examinations conducted by the UPSC, the Civil Services Examination (CSE) is the most competitive and prestigious. It serves as the gateway to several elite public services, including the Indian Administrative Service (IAS), Indian Police Service (IPS), and Indian Foreign Service (IFS). The CSE is structured in three stages: the Preliminary Examination, the Main Examination, and the Personality Test, with the process spanning nearly a year. The examination not only assesses a candidate's academic proficiency but also evaluates attributes such as decision-making, integrity, and emotional resilience.

Given the high-stakes and demanding nature of the CSE, aspirants often undergo prolonged periods of preparation, during which psychological stress is commonly reported. According to the World Health Organization (2023), stress is a state of mental tension caused by challenging circumstances and, when prolonged or unmanaged, can lead to significant physical and psychological consequences. Stress responses involve complex physiological mechanisms, and chronic stress has been associated with conditions such as depression, anxiety, and cardiovascular dysfunction (American Psychological Association, 2022).

Importantly, the effects of stress are not solely determined by the intensity of external events but also by how individuals interpret and respond to them. This distinction is captured by the construct of perceived stress, which refers to an individual's subjective appraisal of life events as unpredictable, uncontrollable, and overwhelming (Cohen et al., 1983). The transactional model of stress, developed by Lazarus and Folkman (1984), emphasizes this interaction between environmental demands and coping resources, suggesting that stress results not just from external pressures, but from the perceived inability to manage them.

Measurement tools such as the Perceived Stress Scale (PSS) are commonly used to evaluate this subjective experience.

In exploring ways to buffer stress and promote well-being, Fredrickson's broaden-and-build theory offers a useful lens. According to Fredrickson (2001), positive emotions—such as joy, interest, and gratitude—broaden one's thought-action repertoire, encouraging more flexible and adaptive thinking. Over time, this broadening effect contributes to the building of personal resources, including emotional, cognitive, and social strengths. In contrast to negative emotions that narrow focus and trigger survival responses, positive emotions promote psychological resilience and long-term flourishing.

One such positive emotion, gratitude, has gained substantial attention in psychological research. Derived from the Latin word *gratia*, meaning grace or thankfulness, gratitude is understood as a felt sense of appreciation for benefits received (Emmons, 2005). It may be experienced as a temporary emotional state or as a stable personality trait (McCullough et al., 2001). Both forms have been linked to higher levels of psychological well-being, optimism, and prosocial behavior. While often directed toward people, gratitude can also emerge in response to impersonal circumstances, such as surviving hardship or witnessing natural beauty (Wood et al., 2011).

Among the most accessible strategies for cultivating gratitude is gratitude journaling, which involves routinely recording events or experiences for which one feels thankful. Early studies by Emmons and McCullough (2003) demonstrated that weekly gratitude journaling improved well-being, optimism, and physical health. More recent findings suggest that gratitude journaling is associated with reduced perceived stress and depressive symptoms, improved emotional regulation, and even healthier lifestyle behaviors (Fritz et al., 2019; Redwine et al., 2016).

The simplicity and low cost of gratitude journaling make it a promising intervention, particularly for populations experiencing sustained stress, such as UPSC aspirants. Grounded in the broaden-and-build framework, gratitude journaling encourages a shift in attention from stressors to positive life events, thereby promoting psychological resilience and enhancing emotional well-being. Its application in high-stress academic and competitive settings may offer a valuable, evidence-based strategy for supporting aspirants' mental health and overall life satisfaction

Statement of the Problem

UPSC civil service aspirants often experience high levels of perceived stress owing to the intense academic demands, prolonged preparation periods, and uncertainty surrounding exam outcomes. This sustained stress can take a toll on their mental health, reduce motivation, and hinder overall well-being. The UPSC Civil Services Examination is widely regarded as one of the most competitive exams in India, requiring aspirants to dedicate several years of focused study—often in social and emotional isolation. Access to psychological support is limited for many due to financial constraints, the stigma attached to seeking mental health care, and a lack of time or availability of resources. While the emotional burden of this journey is widely acknowledged, there remains a scarcity of accessible, culturally appropriate, and affordable interventions that these aspirants can engage in on their own.

Although professional interventions such as psychotherapy have proven effective in managing stress, they are often inaccessible to this population. Furthermore, educational and coaching institutions frequently lack structured mental health programs that address the specific pressures of UPSC preparation. The root issue lies in the absence of simple, scalable, and self-directed psychological strategies that align with the unique lifestyle and needs of these

aspirants. Addressing this gap requires tools that are practical, low-cost, and capable of seamlessly integrating into daily routines without imposing additional burdens.

Gratitude journaling is one such intervention that holds promise. As a self-reflective practice that involves regularly acknowledging and recording positive aspects of life, it fosters emotional resilience and shifts focus away from stressors. Supported by Fredrickson's Broaden-and-Build Theory of Positive Emotions, gratitude journaling can help cultivate enduring psychological strengths such as hope, optimism, and self-regulation. While previous research suggests its potential in improving well-being across various groups, its effectiveness has not been specifically examined in the context of UPSC aspirants. This study seeks to evaluate the impact of a 15-day structured gratitude journaling intervention on perceived stress among UPSC aspirants in Kerala, using a mixed-methods approach that combines both quantitative assessment and qualitative feedback. The aim is to offer evidence for a culturally sensitive, accessible, and sustainable strategy that can support the mental health of aspirants navigating one of the most demanding academic journeys in India.

Need and Significance of the Study

Preparing for the Union Public Service Commission (UPSC) Civil Services Examination places aspirants under sustained psychological pressure. Widely regarded as one of the most competitive and demanding exams in India, the UPSC journey is often marked by chronic academic stress, emotional turbulence, social withdrawal, and, in severe cases, anxiety, burnout, and suicidal ideation (Meenakshy, 2021; Shandilya, 2023; *The Hindu*, 2024). While the need for mental health support among this group is widely acknowledged, many aspirants face significant barriers to accessing professional counselling—ranging from time constraints and financial limitations to stigma surrounding help-seeking behavior.

Although clinical interventions such as psychotherapy have shown effectiveness in reducing distress among students and high-performing individuals (Lamda & Kumar, 2023), there is a noticeable gap in the availability and implementation of low-cost, scalable, and non-clinical strategies that are culturally and contextually suited for UPSC aspirants.

Gratitude journaling presents one such promising intervention. This simple, self-guided activity involves regular reflection on positive experiences or aspects of life. Grounded in Fredrickson's Broaden-and-Build Theory (1998), it has been shown to cultivate positive emotions, which can broaden thought-action repertoires and help build enduring psychological resources such as resilience and coping capacity. For UPSC aspirants, who often face fluctuating motivation, emotional lows, and persistent uncertainty, gratitude journaling may offer a constructive means of reappraising daily experiences and managing stress.

Though gratitude interventions have demonstrated benefits in diverse populations—such as students, healthcare professionals, and corporate employees (Emmons & McCullough, 2003; Cheng et al., 2015; Khanna & Singh, 2021; Zhang et al., 2024)—their utility and relevance have yet to be adequately examined in the context of civil service preparation. This gap is particularly salient in high-pressure educational cultures like that of Kerala, where academic expectations are high, but mental health infrastructure is limited.

Moreover, existing literature presents mixed findings regarding the effectiveness of gratitude journaling. While some studies have found it to significantly reduce perceived stress (Azevedo, 2023; Sahar et al., 2022), others report marginal or no impact (Davis & McCann, 2022). These discrepancies highlight the importance of context-specific evaluation to assess the true utility of gratitude practices in distinct populations.

Importantly, much of the prior research has focused primarily on quantitative outcomes, often neglecting the lived experiences of participants. For emotionally burdened individuals like UPSC aspirants, understanding how they perceive and engage with gratitude journaling can provide deeper insights into its emotional relevance, usability, and perceived value.

This study is thus both timely and necessary. By evaluating the effectiveness of gratitude journaling on perceived stress through a mixed-methods approach, it aims to offer a holistic understanding of how this practice can support the mental well-being of UPSC aspirants. The findings may contribute to the development of accessible, culturally resonant, and psychologically beneficial interventions for high-stakes academic settings.

Objectives of the Study

1. To evaluate the effectiveness of a 15-day gratitude journaling intervention in reducing perceived stress among UPSC aspirants using the Perceived Stress Scale (PSS).
2. To compare the perceived stress levels of participants in the experimental (gratitude journaling) group with those in the control group.

Research Question

1. What are the subjective experiences, emotional impacts, and perceived challenges or benefits reported by UPSC aspirants who participated in a 15-day gratitude journaling intervention?

Hypothesis of the Study

H₀: There will be no significant difference in the perceived stress levels between the experimental group and the control group after the intervention.

Chapter 2

Review of Literature

Review of Literature

Theoretical review

The Cognitive Appraisal Theory of Stress, proposed by Lazarus and Folkman (1984), explains that how we experience stress depends not just on the situation itself, but on how we interpret or appraise it. This theory identifies two types of appraisal: primary (assessing whether an event is threatening or beneficial) and secondary (evaluating whether one has the resources to cope with it). Gratitude journaling can influence both of these processes. By focusing on what is going well and acknowledging positive experiences, individuals may begin to perceive stressors as less overwhelming and more manageable. This shift in perception can reduce overall levels of perceived stress and promote healthier emotional responses

The Broaden-and-Build Theory of Positive Emotions, developed by Barbara Fredrickson (1998, 2001), suggests that positive emotions—such as gratitude—play a crucial role in expanding an individual's momentary thought-action repertoire. Rather than prompting immediate survival responses, positive emotions like gratitude encourage broader thinking, creativity, and openness to new experiences. Over time, this broadened mindset helps individuals build enduring personal resources, including psychological resilience, social bonds, and problem-solving abilities. In the context of stress, these accumulated resources enable individuals to better manage challenges and recover more effectively, making gratitude a valuable emotional asset for long-term well-being.

The Find-Remind-and-Bind Theory of Gratitude, introduced by Algoe, Haidt, and Gable (2008) and later refined by Algoe (2012), offers a social-functional perspective on gratitude. According to this theory, gratitude serves three core functions in relationships: it helps individuals find new high-quality social connections, reminds them of existing supportive relationships, and binds them more closely to these individuals. Gratitude journaling may

activate this cycle by increasing awareness of kind gestures and supportive people in one's life, thereby reinforcing feelings of connection and emotional security. This heightened sense of social support can act as a protective buffer against the negative effects of stress, particularly in high-pressure environments.

Together, these three theories provide a strong conceptual foundation for the current study. The Broaden-and-Build Theory explains how gratitude can cultivate inner resources like resilience and optimism; the Cognitive Appraisal Theory highlights how gratitude may reshape how individuals perceive and respond to stressors; and the Find-Remind-and-Bind Theory emphasizes the relational benefits of gratitude in enhancing social support. These theoretical perspectives collectively suggest that gratitude journaling could positively influence both internal coping mechanisms and external support systems, making it a potentially powerful tool for stress reduction among aspirants preparing for one of India's most demanding competitive exams.

Empirical reviews

To ensure a well-rounded and contextually grounded understanding of the existing research, the review of literature in this study is organized both geographically and thematically. At the first level, studies are categorized according to their geographical origin—international, Asian, Indian, and Kerala-specific. This approach helps highlight how the concept of gratitude and its applications have been studied across different cultural and societal settings. It also makes it possible to identify where gaps exist, especially in the Indian and Kerala contexts, which are most relevant to the present study.

Within each geographical category, studies are grouped thematically wherever applicable. These themes include areas such as gratitude as a concept, gratitude-based interventions, gratitude journaling, the relationship between gratitude and stress, and the specific connection

between gratitude and perceived stress. In addition, studies focusing on UPSC aspirants are included under relevant categories. However, not every geographical context includes all thematic areas. The presence or absence of these themes depends on the scope and availability of research within each setting. This flexible structure allows the literature review to remain focused while still accommodating the diversity and unevenness of available research.

Organizing the review in this way helps build a clear foundation for the current study. It enables a movement from broader global insights to specific local realities, ultimately supporting the need for a focused investigation into how gratitude journaling might help reduce perceived stress among UPSC aspirants in Kerala.

Literature Review - International Context

Gratitude

In 2003, Emmons and McCullough conducted a pioneering experimental study titled *“Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life”* that examined the effects of gratitude journaling on psychological and physical well-being. Participants were assigned to one of three groups: those who listed things they were grateful for, those who recorded daily hassles, and those who noted neutral life events. Over a period of ten weeks, the gratitude group consistently reported higher levels of optimism, positive affect, and fewer physical complaints compared to the other groups. This study provided early empirical support for the role of gratitude as a protective psychological factor and introduced gratitude journaling as a simple yet effective intervention to enhance overall well-being. It has since served as a foundational model for subsequent gratitude-based interventions in both clinical and non-clinical settings

In 2014, Killen and Macaskill conducted a study titled *“Using a Gratitude Intervention to Enhance Well-Being in Older Adults,”* which explored the impact of a brief gratitude

intervention on psychological well-being among healthy, community-dwelling older adults. Recognizing the need for accessible psychological support for an aging population, the study examined the effects of a two-week “Three Good Things in Life” intervention on both hedonic and eudaimonic well-being, as well as perceived stress. A sample of 88 participants aged 60 years or older completed assessments at baseline, post-intervention (day 15), and 30-day follow-up (day 45). Results indicated significant improvements in eudaimonic well-being, as measured by the Flourishing Scale, from baseline to day 15, with these gains maintained at day 45. Although perceived stress levels decreased during the intervention period, these reductions were not sustained after the intervention ended. No significant differences were observed between online and paper-based delivery modes, and many older adults expressed a preference for the online format. The study concludes that gratitude journaling is a cost-effective and acceptable method for enhancing psychological well-being in older adults

Gratitude interventions

In 2016, Davis et al. conducted a meta-analysis titled “*Thankful for the Little Things: A Meta-Analysis of Gratitude Interventions*” to evaluate the overall effectiveness of gratitude interventions across various psychological outcomes. This study was initiated in response to prior critiques, particularly by Wood, Froh, and Geraghty (2010), who questioned the efficacy of such interventions and emphasized the need for improved methodological comparisons. The meta-analysis included 4 to 18 studies, with sample sizes ranging from 395 to 1,755, and assessed outcomes related to gratitude, anxiety, and psychological well-being. The results showed that gratitude interventions significantly outperformed measurement-only controls in improving psychological well-being ($d = 0.31$), though not gratitude levels ($d = 0.20$). Compared to alternative-activity controls, gratitude interventions yielded moderate improvements in gratitude ($d = 0.46$) and small but significant effects on psychological well-being ($d = 0.17$), while changes in anxiety were not statistically significant ($d = 0.11$). Further

breakdowns indicated that gratitude interventions performed slightly better than activity-matched comparisons ($d = 0.14$) but were not more effective than psychologically active controls ($d = -0.03$). These findings highlight the modest yet consistent benefits of gratitude interventions on psychological well-being and underscore the need for well-controlled future research in this area

In 2017, Nicole T. Gabana conducted a study titled *“Exploring the Effects of a Gratitude Intervention with College Student-Athletes,”* which aimed to integrate the principles of sport psychology and positive psychology through the application of a gratitude-based intervention. Grounded in Fredrickson’s (2001) Broaden-and-Build Theory of Positive Emotions, the study explored the implementation of a 90-minute gratitude workshop among 51 NCAA Division I college student-athletes. The intervention aimed to enhance psychological well-being and optimal performance by fostering positive emotional skills such as gratitude, resilience, and hope. Measures of state gratitude, psychological distress, life and sport satisfaction, athlete burnout, and perceived support in sport were taken at three time points: one week prior, immediately after, and four weeks post-intervention. Results from repeated-measures ANOVAs revealed significant increases in gratitude, sport satisfaction, and perceived available support, along with significant decreases in psychological distress and athlete burnout following the intervention. However, multiple regression analyses showed that continued gratitude practice over the subsequent four weeks did not significantly predict changes from post-intervention to follow-up. This study underscores the potential of brief gratitude interventions to improve emotional well-being and performance-related outcomes among athletes

In 2020, Koay et al. conducted a study titled *“Gratitude Intervention on Instagram: An Experimental Study”*, which tested the effectiveness of a social media-based gratitude intervention among young adults. Thirty-three undergraduate students (aged 18–24) were

randomly assigned to either a gratitude group or a control group. The gratitude group posted one gratitude-related photo with a caption on Instagram daily for 7 days, while the control group posted images related to color. Participants completed the Big Five Inventory, Gratitude Questionnaire-6, Perceived Stress Scale, and Satisfaction with Life Scale before and after the intervention. Results showed that the gratitude group had significantly higher post-intervention gratitude levels than the control group, although no significant differences were found in stress or life satisfaction. The study suggests that Instagram-based gratitude interventions may be a feasible and engaging way to enhance gratitude among young adults

In 2021, Komase and colleagues conducted a systematic review titled *“Effects of Gratitude Intervention on Mental Health and Well-Being Among Workers”*, aiming to evaluate the efficacy of gratitude interventions specifically within the working population—an area previously underexplored in existing meta-analyses and reviews. The review involved a comprehensive search across five databases in February 2021, ultimately including nine randomized controlled trials from an initial pool of 1,957 articles. These studies implemented gratitude activities among healthy workers and measured mental health or well-being outcomes. Eight of the nine studies used gratitude list interventions and reported significant improvements in perceived stress and depression. However, findings related to overall well-being were inconsistent. Notably, interventions involving gratitude list practices four times or fewer showed no significant effects on any outcomes. The review concluded that while gratitude interventions—primarily gratitude listing—appear beneficial for mental health, their impact on broader well-being remains inconclusive. The frequency and depth of engagement in gratitude practices may influence their effectiveness, warranting further research given the heterogeneity among existing studies

In 2023, Azevedo conducted a study titled *"The Impact of a Gratitude Intervention on Baccalaureate Nursing Students' Perception of Stress Using the Perceived Stress Scale-10,"* which investigated how gratitude practices could influence stress levels among nursing students. Recognizing the growing concern over how stress negatively affects college students' health and academic performance, this study explored gratitude as a coping strategy rooted in positive psychology. Utilizing a quasi-experimental before-and-after design, the research involved a convenience sample of nursing students at a Christian university in the southwestern United States. Participants completed the Perceived Stress Scale-10 before and after engaging in a single gratitude intervention. Results showed a statistically significant reduction in perceived stress post-intervention ($p < .001$), suggesting that even a brief gratitude activity can positively impact stress levels. The study emphasized that integrating such strategies could support student well-being both academically and professionally, potentially improving retention in the nursing workforce and positively influencing patient care outcomes.

Gratitude journaling

In 2014, Kaczmarek et al. conducted a study named *"Why do people prefer gratitude journaling over gratitude letters? The influence of individual differences in motivation and personality on web-based interventions"* which investigated the motivational factors influencing participation in two widely used gratitude interventions: gratitude journaling and gratitude letter writing. While both interventions aim to enhance feelings of appreciation and social connection, little was known about what drives individuals to initiate and complete them. Using an experimental design with a sample of 904 university students, the study assessed perceived usefulness, social norms, self-efficacy, and intention to engage in each type of intervention. The results indicated that although both interventions were seen as equally beneficial and socially acceptable, participants felt less confident in their ability to write a

gratitude letter. This reduced sense of efficacy led to lower initiation and completion rates for the letter-writing task. The study further found that individuals with higher dispositional gratitude perceived the interventions as easier, more meaningful, and more aligned with social expectations. Additionally, significant gender differences emerged in participants' motivations. These findings shed light on how individual differences and perceived competence can influence the uptake and effectiveness of gratitude-based interventions

In 2021, Caragol, Johnson, and Kwan conducted a pilot and feasibility study titled "*A Gratitude Intervention to Improve Clinician Stress and Professional Satisfaction*," which evaluated the impact of a brief gratitude-based program on resilience and well-being among primary care clinicians. Utilizing a pre-test/post-test single-group design with longitudinal follow-up, the study involved clinicians (MD/DO or NP/PA) who worked at least 0.50 FTE in primary care settings and were recruited from a community engagement conference or two clinical sites in a Western U.S. city. The intervention included a 90-minute in-person psychoeducation and skills-building workshop, followed by eight weeks of daily gratitude journaling. Primary outcomes focused on resilience-related variables such as coping self-efficacy, clinician autonomy, and self-care behaviors, while secondary outcomes included intervention feasibility, acceptability, and career satisfaction. Results demonstrated statistically significant improvements in most resilience outcomes at both four- and eight-week follow-ups, although changes in gratitude levels were not statistically significant. The gratitude expressions most commonly cited by participants related to workplace support and a sense of professional competence. The findings suggest that gratitude interventions may offer a practical and effective means to support clinician well-being, although further research using larger, controlled experimental designs is warranted

In 2022, Davis and McCann conducted a study titled "*Gratitude and Self-Perceived Stress in an Online Doctoral Program*," which aimed to examine the relationship between

mindfulness interventions—specifically gratitude journaling—and perceived stress among doctoral students. The quasi-experimental quantitative study included 292 students enrolled in six courses across three different doctoral programs at a Christian university in the southwestern United States. Participants completed the Perceived Stress Scale (PSS) during the second and sixth weeks of their course. Using a paired t-test for analysis, the researchers found no statistically significant difference in stress levels before and after the intervention, indicating that the gratitude journaling activity did not significantly impact the students' self-perceived stress. Consequently, the null hypothesis was retained

In 2023, Roche et al. conducted a pilot randomized parallel repeated measures study titled *“Pilot Study on the Impact of Gratitude Journaling or Cognitive Strategies on Health Care Workers”* to examine the feasibility, acceptability, and preliminary efficacy of gratitude journaling and cognitive strategies on the mental well-being of pediatric health care workers (HCWs) during the COVID-19 pandemic. The study included 59 participants, primarily nurses and physicians, recruited through convenience and snowball sampling from a pediatric academic medical center. Participants were randomly assigned to either a gratitude journaling group or a cognitive strategies group, and data were collected at four time points—pre-intervention, post-intervention, two weeks later, and six months post-intervention—using standardized electronic surveys. Although reductions in depression and anxiety scores were noted in both groups, these changes were not statistically significant. Nevertheless, participants reported high levels of feasibility and acceptability, indicating the potential of these low-cost, self-guided interventions to support HCWs' mental health, with a recommendation for further research using larger samples

Gratitude and Stress

In the 2011 study by M.E. Gavian, titled "*The Effects of Relaxation and Gratitude Intervention on Stress Outcomes*," the aim was to investigate the effects of relaxation and gratitude interventions on physical and mental health outcomes, as well as reactions to stress. The study involved 247 college students who were randomly assigned to three groups: Progressive Muscle Relaxation (PMR), gratitude journaling, and a control group. The participants underwent a pre-test, followed by a stress-inducing activity and were then assigned interventions such as listening to a PMR audio, writing about what they were grateful for, or following control instructions. Various psychological and physiological variables were assessed, including gratitude (measured using the Gratitude Questionnaire: 6-item form), relaxation (measured using the Smith Relaxation States Inventory), positive affect (measured with the Positive and Negative Affect Schedule), life satisfaction (measured with the Satisfaction with Life Scale), perceived control over stress, serenity, depression, anxiety, stress (measured by the Depression Anxiety Stress Scales), daily stress, physical symptoms (measured with the Cohen-Hoberman Inventory of Physical Symptoms), and subjective event severity. The results revealed that the PMR group demonstrated higher effectiveness in reducing stress outcomes compared to both the gratitude and control groups, suggesting that PMR was more effective at managing stress in this context. The interventions were administered via an online medium, providing participants with easy access to the materials

In 2016, Redwine et al. conducted a pilot randomized controlled trial titled "*Pilot Randomized Study of a Gratitude Journaling Intervention on Heart Rate Variability and Inflammatory Biomarkers in Patients With Stage B Heart Failure*". The study aimed to assess whether gratitude journaling could improve physiological health markers in 70 patients with asymptomatic Stage B heart failure. Participants were randomly assigned to either an 8-week gratitude journaling intervention or a treatment-as-usual group. Measures included the Gratitude Questionnaire-6, heart rate variability (HRV), and an inflammatory biomarker index,

assessed at baseline, mid-intervention, and post-intervention. Results showed that the intervention group experienced increased trait gratitude ($p = .017$), reduced inflammation ($p = .004$), and enhanced parasympathetic HRV during journaling ($p = .036$), though resting HRV did not change significantly. The study suggests that gratitude journaling may positively affect emotional and physiological health, warranting further large-scale research

In 2017, Nicole T. Gabana conducted a study titled *“Exploring the Effects of a Gratitude Intervention with College Student-Athletes,”* which aimed to integrate the principles of sport psychology and positive psychology through the application of a gratitude-based intervention. Grounded in Fredrickson’s (2001) Broaden-and-Build Theory of Positive Emotions, the study explored the implementation of a 90-minute gratitude workshop among 51 NCAA Division I college student-athletes. The intervention aimed to enhance psychological well-being and optimal performance by fostering positive emotional skills such as gratitude, resilience, and hope. Measures of state gratitude, psychological distress, life and sport satisfaction, athlete burnout, and perceived support in sport were taken at three time points: one week prior, immediately after, and four weeks post-intervention. Results from repeated-measures ANOVAs revealed significant increases in gratitude, sport satisfaction, and perceived available support, along with significant decreases in psychological distress and athlete burnout following the intervention. However, multiple regression analyses showed that continued gratitude practice over the subsequent four weeks did not significantly predict changes from post-intervention to follow-up. This study underscores the potential of brief gratitude interventions to improve emotional well-being and performance-related outcomes among athletes

In 2022, Davis and McCann conducted a study titled *“Gratitude and Self-Perceived Stress in an Online Doctoral Program,”* which aimed to examine the relationship between

mindfulness interventions—specifically gratitude journaling—and perceived stress among doctoral students. The quasi-experimental quantitative study included 292 students enrolled in six courses across three different doctoral programs at a Christian university in the southwestern United States. Participants completed the Perceived Stress Scale (PSS) during the second and sixth weeks of their course. Using a paired t-test for analysis, the researchers found no statistically significant difference in stress levels before and after the intervention, indicating that the gratitude journaling activity did not significantly impact the students' self-perceived stress. Consequently, the null hypothesis was retained.

In 2022, Fekete and Deichert conducted a study titled *“A Brief Gratitude Writing Intervention Decreased Stress and Negative Affect During the COVID-19 Pandemic”*, which investigated the effectiveness of gratitude-focused writing as a means of reducing stress during a global crisis. Recognizing the psychological toll of the COVID-19 pandemic, the researchers explored whether gratitude writing could offer more benefits than traditional expressive writing or no intervention. Participants were randomly assigned to one of three groups—gratitude writing, expressive writing, or a control group—and assessed at one-week and one-month intervals post-intervention. Findings indicated that the gratitude writing group sustained their levels of gratitude and experienced a significant decrease in stress and negative affect one month after the intervention. In contrast, the expressive writing group showed no improvements in stress or negative affect, and a decline in gratitude. The control group experienced a decline in both gratitude and negative affect, with no change in stress levels. These results suggest that gratitude writing may be a particularly effective intervention for managing stress and emotional distress in highly uncertain and challenging contexts

In 2023, Azevedo conducted a study titled *“The Impact of a Gratitude Intervention on Baccalaureate Nursing Students’ Perception of Stress Using the Perceived Stress Scale-10,”*

which investigated how gratitude practices could influence stress levels among nursing students. Recognizing the growing concern over how stress negatively affects college students' health and academic performance, this study explored gratitude as a coping strategy rooted in positive psychology. Utilizing a quasi-experimental before-and-after design, the research involved a convenience sample of nursing students at a Christian university in the southwestern United States. Participants completed the Perceived Stress Scale-10 before and after engaging in a single gratitude intervention. Results showed a statistically significant reduction in perceived stress post-intervention ($p < .001$), suggesting that even a brief gratitude activity can positively impact stress levels. The study emphasized that integrating such strategies could support student well-being both academically and professionally, potentially improving retention in the nursing workforce and positively influencing patient care outcomes.

In 2023, Meyer and Stutts conducted a study titled “*The Impact of Single-Session Gratitude Interventions on Stress and Affect*,” which examined the effectiveness of domain-specific and stressor-specific gratitude interventions on stress reduction and emotional well-being. A total of 239 participants from the U.S. general population were randomly assigned to one of three groups: domain-specific gratitude (writing gratitude lists across seven life domains), stressor-specific gratitude (writing gratitude lists about a specific stressor across seven domains), and a control group (task completion list for seven days). Results indicated that participants in the domain-specific gratitude group experienced significant decreases in stress and negative affect, and increases in positive affect, both from pre- to post-intervention and in comparison to the stressor-specific group. The stressor-specific group, while not showing broad affective benefits, demonstrated increased gratitude related to the specific stressor. The control group also showed a decrease in general stress levels over time. These findings suggest that domain-specific gratitude interventions may be particularly effective in enhancing psychological

health, while stressor-specific gratitude may support adaptive reappraisal of stressful experiences

In 2024, Zhang et al. conducted a randomized clinical trial titled *"Effects of a Gratitude Intervention on Job Engagement Among Newly Recruited Nurses"* to assess the impact of gratitude on stress, burnout, and job engagement. A total of 118 new nurses in China were randomly assigned to either a control group (routine training) or an intervention group (routine training plus a 2-month gratitude intervention). Outcome measures included the Utrecht Work Engagement Scale-9 (UWES-9), Gratitude Questionnaire-6 (GQ-6), Perceived Stress Scale (PSS), and Maslach Burnout Inventory (MBI). Results showed that the gratitude group had significantly higher job engagement and personal accomplishment, and lower stress, emotional exhaustion, and depersonalization immediately post-intervention, as well as at 3- and 6-month follow-ups. The study concluded that gratitude interventions can effectively improve job engagement and reduce stress and burnout in newly recruited nurses

Literature review - Asian Context

Gratitude interventions

In 2022, Sahar, Baranovich, and Tharbe conducted a study titled *"Does Gratitude Work at School? Piloting the Modified Interventions for Managing Academic Stress in Pakistani High Schools"*, which explored the effectiveness of gratitude interventions in reducing academic stress and daily hassles. A total of 162 high school students in Pakistan were randomly assigned to experimental (n = 82) and control (n = 80) groups. Over four weeks, the intervention group practiced activities such as *Count Your Blessings*, writing *Gratitude Letters*, and *Loving Kindness Meditations*, all adapted into Urdu. Pre- and post-intervention assessments showed a significant reduction in academic expectations ($t = 5.76$, Cohen's $d = 0.65$) and daily hassles,

with students also reporting decreased stress related to personal future, academic pressure, and social demands. The findings support the feasibility and effectiveness of implementing culturally adapted gratitude interventions in school settings, particularly in low-resource contexts like Pakistan

Gratitude journaling

In 2015, Cheng, Tsui, and Lam conducted a randomized controlled trial titled *“Improving Mental Health in Health Care Practitioners: Randomized Controlled Trial of a Gratitude Intervention,”* which examined the effectiveness of gratitude journaling in reducing occupational stress and depressive symptoms among healthcare professionals. The study, carried out across five public hospitals, employed a double-blind design with 102 participants randomly assigned to one of three groups: a gratitude group, a hassle group, and a control group with no intervention. Over a four-week period, participants in the gratitude and hassle conditions wrote work-related diaries twice a week, focusing on either gratitude or daily hassles, while the control group received no writing task. Outcome measures included depressive symptoms (primary) and perceived stress (secondary), assessed at baseline, post-intervention, and three-month follow-up. Results showed significant reductions in depressive symptoms and perceived stress in the gratitude group compared to both the hassle and control groups, with effects sustained at follow-up. The gratitude group reported notably lower depressive symptoms (Cohen’s $d = -0.49$) and perceived stress (Cohen’s $d = -0.95$), whereas the hassle and control groups showed no significant changes. These findings underscore the potential of gratitude-based interventions as a practical and effective strategy for enhancing the mental health of healthcare practitioners, with possible downstream benefits for patient care and service delivery

In 2017, Işık and Ergüner-Tekinalp conducted a study titled “*The Effects of Gratitude Journaling on Turkish First Year College Students’ College Adjustment, Life Satisfaction and Positive Affect*” to explore the impact of gratitude journaling on students undergoing transitional stress. The study targeted first-year college students who reported high perceived stress and low university adjustment, as measured by the Perceived Stress Scale and the University Life Scale. Out of 24 eligible participants, 21 volunteered to participate, with 11 students assigned to the experimental group and 10 to the control group. The intervention group maintained a gratitude journal for three weeks, while the control group received no gratitude-related activity. Findings revealed that the experimental group showed significant improvements in gratitude levels, adjustment to college life, life satisfaction, and positive affect compared to the control group. This study highlights the effectiveness of gratitude journaling as a positive psychology intervention for enhancing emotional well-being and adaptation among college students experiencing high stress during academic transitions

In 2022, Yu, C.W., Chang, Y.P., Li, C.H., and Wu, H.Y. conducted a study titled “*From Emotion Beliefs to Regulatory Behavior: Gratitude Journaling Initiation and Outcomes*,” which explored the motivational factors influencing individuals’ engagement in gratitude journaling and how these factors relate to the emotional outcomes of the practice. The researchers proposed that two emotion-related beliefs—the desirability of happiness and the uncontrollability of negative emotion—would predict both the initiation of gratitude journaling and its emotional benefits. A total of 311 participants were recruited online to examine whether and how these beliefs translated into voluntary journaling behavior. Among those who initiated a gratitude journal ($n = 101$), the study further investigated the predictive role of these beliefs in determining emotional outcomes. The results showed that belief in the desirability of happiness positively predicted journaling initiation through both attitude-intention and subjective norm-intention pathways, and was associated with an increase in ideal positive

affect. Conversely, the belief in the uncontrollability of negative emotions did not significantly predict journaling initiation due to opposing indirect effects, but it was positively related to changes in actual positive affect. These findings offer insights into the pathways linking emotion beliefs to regulatory behaviors and have implications for designing more effective gratitude-based and positive psychology interventions

Literature review – Indian context

Gratitude interventions

In 2023, Srivastava and Ghosh conducted a study titled “*Online Gratitude Interventions during COVID-19 Pandemic on Youth: Randomized Trial*,” which examined the effectiveness of gratitude interventions in enhancing well-being among Indian youth during the coronavirus lockdown. The study also aimed to compare the effects of a single gratitude intervention with a combination of two interventions. A total of 80 participants were randomly assigned to experimental and control groups (n = 40 each). Findings revealed that the experimental group showed significant improvements in mental health, happiness, and gratitude, along with reductions in depression, anxiety, and stress following a single gratitude intervention. Moreover, the group that received two gratitude interventions exhibited even greater improvements in these psychological outcomes compared to the group receiving a single intervention. In contrast, no significant changes were observed in the control group. These results suggest that online gratitude interventions can be effective tools for promoting psychological well-being during times of crisis, and that combining interventions may amplify their impact. The study highlights the potential of integrating gratitude-based practices into virtual mental health care, especially when in-person counseling is not feasible

Gratitude journaling

The 2021 study titled "*Stress Management Training and Gratitude Journaling in the Classroom: An Initial Investigation in Indian Context*" by Khanna and Singh aimed to evaluate the impact of classroom-based stress management training and gratitude journaling interventions among Indian adolescents. The study involved 238 students from 20 schools across North India, with eight schools agreeing to participate in the overall research project. The participants were divided into four groups: three intervention groups (stress management training, gratitude journaling, and a combination of both), and one control group. A pre-test-post-test design was used to assess the intervention's impact on various outcomes, including well-being, life satisfaction, perceived stress, meaning, and engagement in the classroom. The goal of the study was to understand the effectiveness of these interventions in enhancing student well-being and reducing stress in the Indian context

Gratitude and Stress among UPSC Aspirants

In 2022, *The Times of India* reported the death by suicide of Anjali Gopnarayan, a 24-year-old UPSC aspirant from Maharashtra, who had moved to Old Rajender Nagar in Delhi to prepare for the civil services examination. Despite being described as an intelligent and motivated student, Anjali reportedly experienced symptoms of depression following her failure to clear the UPSC preliminary exam. Friends and family members noted no apparent warning signs, underscoring the silent psychological toll that competitive exam failure can impose. Her case illustrates the intense emotional strain associated with UPSC preparation, exacerbated by high personal expectations and challenging living conditions (TOI, 2022). This incident reflects a broader pattern of distress among aspirants, aligning with other reports that highlight how academic setbacks, isolation, and environmental stressors can culminate in severe mental health outcomes. As such, it emphasizes the critical importance of integrating psychological support systems into educational contexts that involve high-stakes competition

A 2023 survey study by Shandilya aimed to assess the mental health status of UPSC aspirants, highlighting the mental stress associated with exam preparation. Conducted through an online survey, the study included 203 participants aged between 19 and 33 years who were either preparing for or had attempted the UPSC exam. The survey gathered data on participants' attempts, coaching institutes, physical and mental health, emotional issues, sleep hours, and preparation status. Key findings showed that while most participants rated their physical health as good, many reported poor mental health, emotional problems, feelings of being low, and sleep disturbances. The study emphasizes the need for mental health support, including counseling services and awareness programs for UPSC aspirants. The study does not specify the author or year

In 2023, Lamda and Kumar conducted an intervention-based study titled “*An intervention based study on Perceived stress*” to explore and compare the effectiveness of psychotherapy on perceived stress in UPSC aspirants. The study aimed to assess how psychotherapy could reduce stress in students preparing for one of India's most competitive exams. Conducted in coaching institutes and libraries across Chandigarh, Mohali, Panchkula, and Zirakpur, the study involved 120 participants who were divided into an experimental group (which received psychotherapy) and a control group (which did not receive any intervention). The researchers used a pre-post design to measure the participants' stress levels before and after the intervention. To assess perceived stress, the study employed the Perceived Stress Scale (PSS) and the Visual Analog Scale (VAS). The findings revealed that the experimental group, which underwent psychotherapy, showed a significant reduction in perceived stress compared to the control group, suggesting that psychotherapy can be an effective intervention for managing stress among UPSC aspirants

In 2024, *The Hindu* reports that the flooding of a coaching institute's basement in Delhi brought national attention to the harsh living and studying conditions faced by UPSC aspirants, highlighting the intense psychological pressures they endure (Palshikar, Attri, & Kumar, 2024). The mental health toll is significant, with the NCRB (2021) noting that 35 students die by suicide daily, and Lokniti-CSDS data indicating that one in four UPSC aspirants knows someone who has self-harmed or attempted suicide due to academic stress. The preparation process demands extreme academic rigor—10 to 12 hours of daily study, constant engagement with current affairs, and personal sacrifices such as sleep, social interaction, and self-care. Nearly half of aspirants report self-induced pressure, one-third struggle with performance anxiety, and many experience additional stress from peer (36%) and family (24%) expectations. These findings underscore the urgent need for mental health interventions tailored to this vulnerable group.

In 2024, Pundir conducted a study titled “*Beyond the Prestige: Psychological Insights into Emotional Intelligence, Resilience, and Motivation Across Multiple UPSC CSE Attempts*”, examining the psychological toll of repeated attempts at the UPSC Civil Services Examination. Although the exam is widely regarded as a gateway to elite administrative positions in India, the study revealed that aspirants often face significant emotional and mental challenges. Analyzing data from 103 candidates, the findings indicated a decline in emotional intelligence (EQ) after more than three attempts, while psychological hardiness showed improvement. Interestingly, motivation levels remained relatively stable across groups regardless of the number of attempts. These results highlight the disconnect between the prestigious image of the UPSC journey and the lived experiences of aspirants, emphasizing the need for structured psychological support and resilience-building interventions to help mitigate the cumulative stress associated with prolonged preparation.

Literature review – Kerala Context

Gratitude

In 2024, Thomas, Zebukumar, and Arun conducted a study titled “*Gratitude Expression, Helping Behaviour and Psychosocial Wellbeing Among Adolescent Students in Kerala*” to examine the predictive roles of gratitude and helping behaviour on psychosocial well-being in adolescents. Drawing upon principles from positive psychology, the study included a sample of 60 adolescent students (30 boys and 30 girls) from both government and private educational institutions in Kerala. Participants were assessed using the Gratitude Questionnaire (McCullough, 2013), the Helping Attitude Scale (Nickell, 1998), and the Flourishing Scale (Diener & Biswas-Diener, 2009). Results from Pearson product-moment correlation revealed significant positive correlations among gratitude, helping behaviour, and psychosocial well-being. However, regression analysis indicated that only gratitude significantly predicted psychosocial well-being, while helping behaviour did not emerge as a significant predictor. These findings emphasize the crucial role of gratitude in fostering adolescent well-being and suggest the need for further research to explore additional predictors of psychosocial health in this population.

Gratitude Journaling

In 2023, James, George, Alphonse, & Saheedha, conducted a study titled “*Immediate Effect of Gratitude Journal on Mental Well-being of College Students in Kerala*”, published in the Indian Journal of Psychiatric Nursing. The study aimed to examine the immediate effects of gratitude journaling on mental well-being among college students at the University Institute of Technology (UIT), Karuvatta, Alappuzha, Kerala. The study involved 108 college students (50 females and 58 males), aged 18 to 25, who were randomly divided into two groups: an

experimental group (n = 54) and a control group (n = 54). Using an experimental design with a pretest-posttest approach, the experimental group filled out a gratitude journal worksheet from the book *Mind Over Mood* by Dennis and Padesky, focusing on three areas of gratitude: for the world, for others, and for themselves. Mental well-being was assessed using the Warwick Edinburgh Mental Well-being Scale (WEMWBS). The findings showed a significant improvement in mental well-being for the experimental group compared to the control group, suggesting that gratitude journaling can have an immediate positive impact on college students' mental health.

UPSC Aspirants and their mental health

In 2021, Meenakshy, a postgraduate sociology student from Vimala College (Autonomous), Thrissur, conducted a qualitative study titled “*Covid Impact on the UPSC Civil Service Aspirants*”, exploring how the COVID-19 pandemic and lockdown affected aspirants' preparation. The study revealed that the pandemic significantly disrupted the educational landscape, particularly impacting youth engaged in competitive exam preparation. UPSC aspirants faced multiple challenges, including difficulties adapting to online learning, disrupted study schedules, and growing uncertainty about their future careers. The psychological burden was especially severe for candidates nearing the upper age limit for eligibility, who perceived the lockdown period as a loss of crucial preparation time. This study highlights the vulnerability of aspirants to external crises and emphasizes the need for more resilient support systems to safeguard their academic and mental well-being during disruptions.

Research Gap

Gratitude-based interventions have received growing attention for their potential to enhance well-being and reduce stress. Studies across various populations—including

adolescents (Khanna & Singh, 2021), college student-athletes (Gabana, 2017), nursing students (Azevedo, 2023), doctoral learners (Davis & McCann, 2022), and young adults during the COVID-19 pandemic (Srivastava & Ghosh, 2023)—have explored how such practices can improve mental health. While these interventions have often demonstrated promising outcomes, their effectiveness has not been consistent across all contexts or groups.

One area that remains underexplored is the psychological well-being of UPSC aspirants in Kerala—a group that frequently faces prolonged academic uncertainty, intense competition, and mounting sociocultural expectations. The stressors experienced by this population are unique, chronic, and often go unaddressed by conventional support systems. Yet, little research has been done to assess how context-specific gratitude interventions might support their mental health.

Additionally, previous studies have yielded mixed results. While some report a significant reduction in perceived stress following gratitude interventions (e.g., Azevedo, 2023; Sahar et al., 2022), others have found little to no impact (e.g., Davis & McCann, 2022). These inconsistencies highlight the importance of investigating such interventions within distinct sociocultural and academic frameworks.

Another important limitation in existing literature is the dominant focus on quantitative data, which often overlooks participants' subjective experiences. Tools like the Perceived Stress Scale (PSS) offer valuable insights into numerical change, but they don't fully capture the emotional, cognitive, and motivational shifts that may occur during or after a gratitude intervention. Particularly in high-stress populations like UPSC aspirants, understanding these qualitative dimensions is crucial for designing interventions that are both effective and personally meaningful.

This study seeks to address these gaps by evaluating the effectiveness of a structured gratitude journaling intervention among UPSC aspirants in Kerala. By integrating both quantitative measures of perceived stress and qualitative feedback on participants' experiences, the research aims to offer a holistic understanding of how gratitude journaling may function as a low-cost, culturally sensitive, and scalable mental health resource for this underserved group.

Chapter 3

Methodology

Methodology

Title of the study

Effectiveness of Gratitude Journaling on Perceived Stress among UPSC aspirants

Research design

Mixed-methods designs that incorporate an experimental or quasi-experimental component are considered among the most advanced and resource-intensive approaches. These designs typically prioritize quantitative data collection and analysis, distinguishing them from sequential and convergent mixed-methods models. In such designs, qualitative data—often gathered through interviews or open-ended responses—is usually collected after the intervention, though it may also be included beforehand to inform intervention development or during the intervention to capture ongoing experiences (PsycInfo Database Record, © 2025 APA).

In alignment with this framework, the present study adopted a mixed-methods quasi-experimental design to evaluate the effectiveness of a gratitude journaling intervention on perceived stress among UPSC aspirants in Kerala. The design integrated both quantitative and qualitative methods to obtain a comprehensive understanding of the intervention's outcomes. A pre-test–post-test approach was used to compare perceived stress scores between an experimental group and a control group. Additionally, qualitative feedback was collected through open-ended responses to explore participants' subjective experiences of the journaling process.

Participants

The sample consisted of 18 UPSC aspirants from various districts across Kerala, divided equally into an experimental group ($n = 9$) and a control group ($n = 9$). The participants

included both male and female aspirants, ranging in age from 21 to 32 years. All were actively preparing for the UPSC Civil Services Examination and had attempted the examination anywhere from 0 to more than 3 times. Both first-time and repeating candidates were included. Participants were either enrolled in coaching programs or engaged in self-study. Those who failed to consistently adhere to the intervention protocol were not included in the final sample.

Sampling method

Participants were selected using a combination of purposive and convenience sampling. Initial attempts to recruit UPSC aspirants through coaching institutes in Kerala were hindered by delays in institutional approvals and limited responsiveness. To ensure timely data collection, recruitment was expanded through WhatsApp and personal networks. A structured Google Form was used for pre-screening, which included informed consent, sociodemographic details (e.g., age, gender, place of residence, study mode, number of UPSC attempts), and the Perceived Stress Scale (PSS). Aspirants who scored 14 or above on the PSS were considered eligible for inclusion, based on standard cut-offs indicating moderate to high perceived stress. The initial target was 20 participants per group, but after applying inclusion criteria and accounting for attrition, the final sample comprised 18 participants (9 in the experimental group and 9 in the control group).

Conceptual Definitions

Gratitude journaling

Theoretical definition: Gratitude journaling is a structured and reflective practice in which individuals regularly document aspects of life for which they feel thankful—such as people, experiences, or moments of joy. Typically undertaken on a daily or weekly basis, this intentional activity serves as a psychological tool to cultivate appreciation, enhance self-awareness, and increase attention to positive experiences (Emmons & McCullough, 2003).

By consciously shifting focus away from stressors and toward affirming elements of life, gratitude journaling fosters emotional regulation, promotes psychological well-being, and builds resilience over time.

Operational definition: In the context of this study, Gratitude Journaling refers to a structured psychological intervention in which UPSC civil service aspirants intentionally record and reflect upon positive aspects of their lives—such as meaningful experiences, supportive relationships, or personal achievements—for which they feel thankful. This practice was implemented daily over a 15-day period, with participants writing either a list or brief reflections on moments that evoked gratitude. The objective of this activity was to foster positive emotions, reduce perceived stress, and enhance psychological well-being during the demanding UPSC preparation phase.

Perceived stress

Theoretical Definition: Perceived stress is defined as how an individual understands the amount of stress he or she is exposed to in a period of time (Cohen et.al, 1983). It is related to a feeling of uncertainty and instability about life and depends on the confidence in one's ability to handle difficulties

Operational definition: In the context of this study, Perceived stress refers to the self-reported level of stress experienced by UPSC civil service aspirants over the past 15 days, as measured by the Perceived Stress Scale (PSS; Cohen et al., 1983). It captures the degree to which these individuals appraise their preparation period and daily challenges as unpredictable, uncontrollable, and overwhelming, particularly in relation to the high demands and uncertainty associated with the UPSC examination process.

Tools of data collection

Perceived Stress Scale by Sheldon Cohen

The Perceived Stress Scale (PSS-10) was developed by Sheldon Cohen, Kamarck, and Mermelstein in 1983 to assess the extent to which individuals appraise situations in their lives as stressful. It is a self-report scale consisting of 10 items, designed to capture the degree of perceived unpredictability, uncontrollability, and overload in daily life. Respondents indicate how often they have felt or thought a certain way over the past month using a 5-point Likert scale ranging from 0 ("never") to 4 ("very often"). The items are phrased in a general and easily understandable manner, making the scale suitable for a wide range of populations.

Psychometric evaluations of the PSS-10 demonstrate strong reliability and validity. The scale shows high internal consistency, with a Cronbach's alpha of 0.82 for the 10-item version. Its construct validity has been established through confirmatory factor analysis, and the PSS also correlates well with other measures of emotional distress, such as the DASS-21. Different versions of the scale (PSS-14, PSS-10, PSS-4) have been assessed, with the PSS-10 offering a balance of brevity and reliability, while the shorter 4-item version showed only marginally satisfactory reliability ($\alpha = 0.69$).

In terms of scoring, four positively stated items are reverse-scored, and the scores of all 10 items are summed to yield a total score ranging from 0 to 40, with higher scores indicating greater perceived stress. The scale measures stress experienced over the past one month, which makes it useful for detecting changes over short periods—ideal for pre-post intervention designs.

The Perceived Stress Scale – 10 was chosen to evaluate the effectiveness of a gratitude journaling intervention on perceived stress among UPSC Civil Services Examination aspirants, because of its focus on subjective stress appraisal. UPSC aspirants often face intense academic and emotional pressure while preparing for this highly competitive examination, even if they do not meet clinical thresholds for anxiety or depression. The PSS-10, which is sensitive to

non-clinical variations in stress and has been widely used in research on stress-reduction interventions, including gratitude practices, was therefore a methodologically sound and contextually relevant choice. Its brevity, ease of administration, and ability to capture short-term psychological changes made it especially well-suited for a population with demanding schedules like UPSC aspirants.

Procedure of data collection

The data collection process was initiated through a Google Form that served as the pre-test tool. This form included an informed consent statement, sociodemographic details, and the Perceived Stress Scale–10 (PSS-10). The sociodemographic section gathered information such as the participant's name, age, place of residence, name of the institute they were attending, the number of attempts they had made for the UPSC examination, and their WhatsApp number for further communication. The pre-test form was circulated via WhatsApp to reach eligible UPSC aspirants.

According to the PSS manual, scores ranging from 0–13 indicate low perceived stress, 14–26 indicate moderate perceived stress, and 27–40 indicate high perceived stress. Individuals who scored 14 or above on the PSS-10 were considered eligible for the intervention. These individuals were contacted and invited to participate in the 15-day gratitude journaling intervention. Those who expressed willingness and availability to commit to the full duration of the intervention were included in the experimental group. Individuals who declined participation in the intervention but were open to follow-up assessment were assigned to the control group. No intervention or placebo activity was provided to the control group.

The intervention was administered entirely through Google Forms over a period of 15 consecutive days, beginning on the second Sunday of June. This timing was selected because most UPSC aspirants had just completed their preliminary exams and were awaiting their results—a period often marked by uncertainty and stress. Each day, participants in the

experimental group received a unique Google Form containing a gratitude journaling prompt. Daily entries were mandatory, and only participants who completed all 15 days of the intervention were included in the final analysis. The form required participants to enter their name, the date of entry, the day of the intervention, a specific gratitude prompt, a list of three things they were grateful for, a reflection on how writing about gratitude made them feel that day, and one intention they wished to carry into the following day. The daily prompts were as follows:

Day 1: What made you smile today?

Day 2: Who supported you today?

Day 3: What did your body help you do today?

Day 4: What in nature did you enjoy today?

Day 5: What did you learn that you're grateful for?

Day 6: What challenge helped you grow today?

Day 7: What are you proud of yourself for today?

Day 8: What unexpected good thing happened today?

Day 9: What did someone do for you today?

Day 10: What object made your day easier?

Day 11: What part of your routine was comforting?

Day 12: What kind thought did you give yourself?

Day 13: What gave you meaning today?

Day 14: What was a small win today?

Day 15: What changed for you over these 15 days?

On the 16th day, a post-test Google Form was administered to both the experimental and control groups. This form included a reconfirmation of informed consent to ensure ethical compliance, along with the Perceived Stress Scale (PSS-10) to evaluate any changes in

perceived stress levels. In addition to this, participants in the experimental group were requested to complete a feedback form reflecting on their experiences with the 15-day gratitude journaling intervention, thereby marking the conclusion of the process.

The feedback form consisted of the following open-ended questions:

1. *How did you feel after completing the 15 days of gratitude journaling?*
2. *Can you describe any changes you noticed in your emotions, thoughts, or behavior during or after the journaling practice?*
3. *Did you face any difficulties while writing in the journal? If yes, please describe.*
4. *Do you plan to continue gratitude journaling in the future? Why or why not?*
5. *Would you recommend this activity to someone else? If yes, please explain your reason.*
6. *Any suggestions to improve this activity or make it more helpful?*

Ethical clearance for the study was obtained in advance, and all participant responses were kept strictly confidential throughout the process.

Data Analysis

This study employed a mixed-methods design, incorporating both quantitative and qualitative data to provide a holistic understanding of the impact of the gratitude journaling intervention. This integrated approach allowed the researcher to capture not only measurable changes in perceived stress levels but also the participants' personal experiences related to emotional regulation, self-awareness, and psychological well-being.

Quantitative Data Analysis

Quantitative data were collected using the Perceived Stress Scale (PSS-10), administered to both the experimental and control groups on Day 1 (pre-test) and again on Day 16 (post-test). The data were analysed using IBM SPSS Statistics (Version 22). Descriptive

statistics, including means and standard deviations, were calculated to summarize stress scores within each group at both time points.

To determine whether the intervention led to a significant change in stress levels among participants in the experimental group, a paired samples t-test was conducted. This test assessed whether there was a meaningful difference in perceived stress before and after the 15-day journaling practice within the same individuals. Additionally, an independent samples t-test was performed to compare post-test scores between the experimental and control groups, in order to examine any differences in outcomes between those who received the intervention and those who did not.

Before running the tests, the data were assessed for normality using the Shapiro-Wilk test, and the assumptions for parametric analysis were met. All statistical tests were interpreted using a significance level of $p < .05$.

Qualitative Data Analysis

In order to explore participants' subjective experiences and complement the quantitative findings, qualitative data were collected through an open-ended feedback form. All nine participants in the experimental group completed the form on Day 16, following the conclusion of the intervention. The form included six reflective questions designed to encourage participants to share their emotional reactions, personal insights, perceived benefits, and any difficulties encountered while engaging in the gratitude journaling practice.

The responses were analyzed using thematic analysis, following the six-phase process outlined by Braun and Clarke (2006). The analysis was carried out manually and began with familiarizing oneself with the data through repeated reading. From there, initial codes were developed by identifying meaningful segments of text. These codes were then grouped into broader themes, which were reviewed and refined to ensure conceptual clarity and coherence.

The final themes were defined and named, and the results were presented in the next chapter along with representative quotes from participants to illustrate key ideas.

This qualitative analysis helped to uncover the emotional depth and reflective nature of participants' experiences, adding context and richness to the quantitative outcomes and deepening the overall understanding of the intervention's impact.

Chapter 4

Results and Discussion

Results and Discussion

Quantitative Analysis

Table 1

Sociodemographic details, pretest, and post scores of the control group

Participants	Age	Gender	Place	No. of attempts	Pretest scores	Post test scores
P1	26	Female	Thiruvananthapuram	More Than 3	33	25
P2	21	Female	Thrissur	1	18	20
P3	24	Female	Aluva	1	14	17
P4	21	Female	Kollam	1	30	24
P5	25	Female	Thiruvananthapuram	2	21	30
P6	22	Female	Kollam	1	30	22
P7	24	Male	Kollam	1	19	12
P8	22	Female	Kozhikode	1	21	23
P9	21	Female	Thiruvananthapuram	1	20	16

Table 2

Sociodemographic details, pretest, and post-test scores of the experimental group

Participants	Age	Gender	Place	No. of attempts	Pretest scores	Post test scores
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P10	29	Female	Kollam	2	29	19
P11	24	Female	Thiruvananthapuram	1	30	32
P12	22	Male	Thiruvananthapuram	1	31	26
P13	27	Female	Thiruvananthapuram	More Than 3	28	12
P14	23	Female	Pala	1	18	18
P15	24	Male	Palakkad	0	27	26
P16	22	Female	Alappuzha	1	25	25
P17	23	Female	Thiruvananthapuram	0	28	16
P18	25	Female	Thiruvananthapuram	0	18	11

Table 3

Descriptive Statistics for Perceived Stress Scores in Both Groups

Paired Samples Statistics					
Group			Mean	N	Std. Deviation
Experimental Group	Pair 1	Pretest Scores	26.00	9	4.848
		Post Test Scores	20.56	9	7.108
Control Group	Pair 1	Pretest Scores	22.89	9	6.489
		Post Test Scores	21.00	9	5.408

Table 4*Mean Difference and Standard Deviation in Perceived Stress Scores (Pretest – Post-test)*

Paired Samples Test				
			Paired Differences	
Group			Mean	Std. Deviation
Experimental Group	Pair 1	Pretest Scores - Post Test Scores	5.444	6.247
Control Group	Pair 1	Pretest Scores - Post Test Scores	1.889	6.071

Table 5*Mean Difference and Standard Error (Experimental and control group pre–post comparisons)*

Paired Samples Test			
			Paired Differences
Group			Std. Error Mean
Experimental Group	Pair 1	Pretest Scores - Post Test Scores	2.082
Control Group	Pair 1	Pretest Scores - Post Test Scores	2.024

Table 6*Within-group comparison of pretest and post-test Perceived Stress Scale scores*

Paired Samples Test				
Group			t	df
Experimental Group	Pair 1	Pretest Scores - Post Test Scores	2.614	8
Control Group	Pair 1	Pretest Scores - Post Test Scores	.933	8

Table 7*Statistical significance of stress reduction within each group*

Paired Samples Test			
Group			Sig. (2-tailed)
Experimental Group	Pair 1	pretest scores - post test scores	.031
Control Group	Pair 1	pretest scores - post test scores	.378

Table 8*Descriptive comparison of post-test Perceived Stress Scale scores between groups*

Group Statistics				
	Group	N	Mean	Std. Deviation
post test scores	Experimental Group	9	20.56	7.108
	Control Group	9	21.00	5.408

Table 9*Independent Samples t-Test: Post-test Scores Between Experimental and Control Groups*

Independent Samples Test				
t-test for Equality of Means				
		t	df	Sig. (2-tailed)
post test scores	Equal variances assumed	-.149	16	.883
	Equal variances not assumed	-.149	14.937	.883

Descriptive statistics were computed for the pre-test and post-test Perceived Stress Scale (PSS) scores of both the experimental and control groups (Table 1). The experimental group ($n = 9$) had a mean pre-test score of 26.00 ($SD = 4.85$) and a mean post-test score of 20.56 ($SD = 7.11$). The control group ($n = 9$) had a mean pre-test score of 22.89 ($SD = 6.49$) and a mean post-test score of 21.00 ($SD = 5.41$).

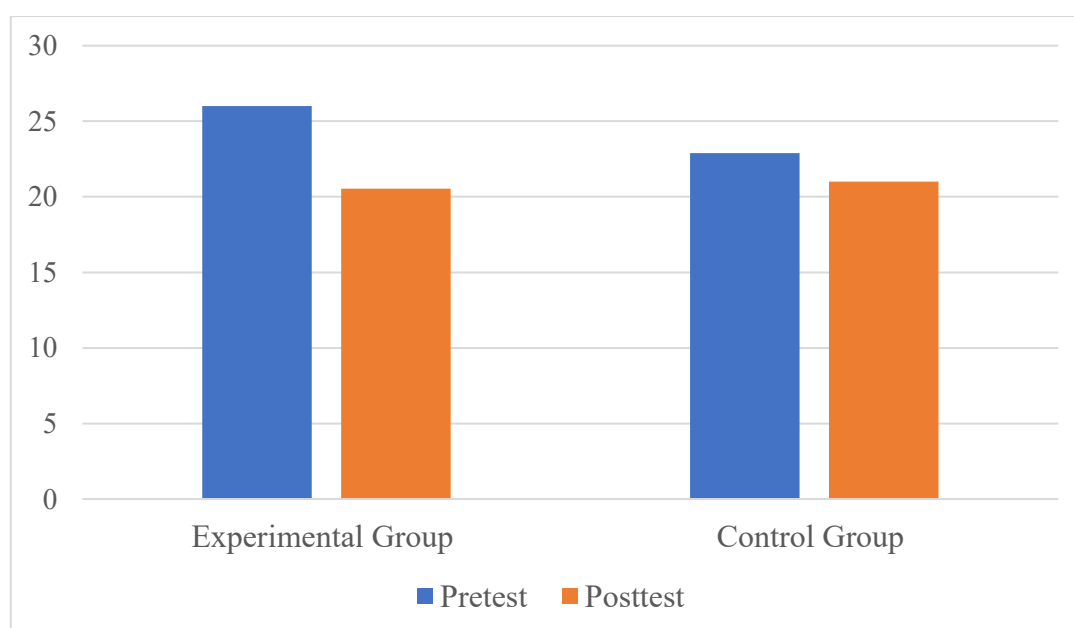
To examine changes in stress levels over time within each group, a paired samples *t*-test was conducted. For the experimental group, the results indicated a statistically significant decrease in perceived stress scores from pre-test ($M = 26.00$, $SD = 4.85$) to post-test ($M = 20.56$, $SD = 7.11$), $t(8) = 2.614$, $p = .031$. Accordingly, the null hypothesis—that there is no significant difference in perceived stress levels before and after the intervention—is rejected. The effect size indicates a moderate to large reduction in perceived stress following the gratitude journaling intervention.

For the control group, the change in scores from pre-test ($M = 22.89$, $SD = 6.49$) to post-test ($M = 21.00$, $SD = 5.41$) was not statistically significant, $t(8) = 0.933$, $p = .378$.

An independent samples *t*-test was conducted to compare the post-test PSS scores between the experimental and control groups. Results indicated no statistically significant difference between the groups, $t(16) = -0.149$, $p = .883$. The experimental group ($M = 20.56$, $SD = 7.11$) and control group ($M = 21.00$, $SD = 5.41$) had similar post-test scores.

Figure 1

Comparison of Pretest and Post-test Scores Between Experimental and Control Groups



Interpretation

The findings of the study indicate that gratitude journaling may serve as a promising intervention for reducing perceived stress among UPSC civil service aspirants. Participants in the experimental group, who engaged in a 15-day gratitude journaling practice, showed a statistically significant decrease in their stress levels from pre-test to post-test. This trend is visually represented in Figure 1, which depicts the reduction in mean perceived stress scores for the experimental group over the course of the intervention. This reduction suggests that the intervention facilitated emotional and cognitive shifts that contributed to improved psychological well-being. In particular, focusing daily on aspects of life to be grateful for may have helped aspirants reframe their stressors, experience more positive emotions, and build internal resources for coping—aligning with the principles of the broaden-and-build theory of positive emotions.

Based on these findings, the null hypothesis—stating that there would be no significant difference in perceived stress levels before and after the intervention—was rejected. This statistical outcome strengthens the interpretation that gratitude journaling can be an effective, low-cost strategy for enhancing resilience and emotional regulation in high-stress academic environments.

Meanwhile, participants in the control group, who did not engage in any structured intervention during the same period, did not show any significant change in their stress levels. This contrast suggests that the improvement seen in the experimental group was not merely due to the passage of time or external influences, but can be reasonably attributed to the journaling activity itself. The structured act of gratitude reflection may have offered a consistent emotional buffer against the demanding and uncertain nature of civil service preparation.

Although the experimental group exhibited a notable reduction in perceived stress from pre- to post-test, the comparison of post-test scores between the experimental and control groups did not reveal a statistically significant difference. This suggests that the observed improvements cannot be solely attributed to the gratitude journaling intervention. Several factors—such as natural stress adaptation over time, individual coping mechanisms, or environmental influences—may have contributed to changes in stress levels across both groups. Moreover, the small sample size ($n = 9$ per group) may have limited the statistical power to detect between-group differences. The relatively short duration of the intervention (15 days) may also have been insufficient to produce effects strong enough to distinguish the groups at a broader level.

Nevertheless, the direction and consistency of change within the experimental group remain noteworthy and suggest that gratitude journaling may hold promise as a supportive tool for stress reduction in high-pressure academic contexts. Taken together, the results suggest that gratitude journaling is not only a low-cost and accessible strategy but also one that holds meaningful potential to support aspirants in managing stress during a highly competitive and emotionally taxing phase of their academic journey

Qualitative Analysis

Thematic analysis of the participants' feedback revealed 9 overarching themes, each reflecting key psychological, emotional, and practical aspects of their experience with gratitude journaling. The themes are discussed below with illustrative quotes from participants.

Theme 1: Emotional Upliftment

Many participants reported a marked improvement in their emotional state during and after the journaling intervention. Sub-themes such as *feeling good*, *feeling positive*, *joyful*, and

relieved were consistently echoed across responses. These emotional shifts suggested a heightened sense of hope and lightness.

“Increased positivity and better sleep.”

“I was somewhat relieved and much joyful during or after the journalling practice.”

This theme highlights the potential of gratitude journaling to foster short-term emotional well-being.

Theme 2: Inner Peace and Contentment

Several participants described feelings of *comfort*, *relaxation*, and *satisfaction*, reflecting a state of internal calmness and emotional warmth. These experiences pointed toward an increase in emotional regulation and self-soothing.

“The action of locating minute observations that make us happy felt comforting.”

“I feel relaxed.”

“Some sort of satisfaction and happiness.”

Theme 3: Self-awareness and Reflection

The journaling activity facilitated deeper *mindfulness*, *awareness*, and *consciousness* in participants. Many noted that writing daily helped them tune into their thoughts, actions, and emotional states.

“Became more conscious about the things happening each day.”

“Started appreciating surroundings more.”

“Started appreciating little things more.”

“I started becoming more calm to myself and to people that I interact with.”

Theme 4: Growth Through Challenge

Despite the benefits, some participants admitted the process was emotionally *difficult* and required *honesty* and *consistency*. This theme reflects how pushing through emotional resistance contributed to personal growth.

“It was hard to locate whatever was written.”

“Felt positive as I was able to stick to the schedule.”

“Initially thought it would be like revealing private things...but later, I felt it as a support system.”

“I am glad that I was consistent.”

Theme 5: Gratitude and Perspective Shift

Expressions of *gratefulness* and *appreciation* emerged strongly, particularly as participants began to value small, meaningful aspects of their day. This perspective shift cultivated a deeper emotional richness.

“Started appreciating surroundings more.”

“Became grateful for the things around me”

“To turn events in a positive perspective.”

Theme 6: Reflective Recall

The journaling practice prompted participants to *recollect their activities and emotions*, which in turn fostered clarity and organization in their thoughts.

“I recall all things I have done that day.”

“Became more conscious about the things happening each day .. recover the emotions which I felt.”

Theme 7: Practical Barriers to Engagement

Not all participants found the experience seamless. Some faced *time constraints*, *emotional overwhelm*, or a *lack of relevant content* to respond to certain prompts.

“I always forgot to check my phone because of my studies.”

“sometimes I lacked content to fill.”

Theme 8: Intrinsic Motivation

One of the participants described how the positive impact of journaling led to *internal motivation* and how they even purchased a gratitude journal as a gift to themselves after completing the intervention.

“Now, when I’ve done this 15 days activity, it makes me happy and relieved everytime I write gratitude journaling so I bought a gratitude journal just to give myself a gift.”

Others shared how *reminders* or *emotional expression* helped them stay engaged despite initial reluctance.

“Need to keep a reminder, otherwise will forget.”

“I would like to continue with it in the future since I can write about my feelings in an open manner.”

“Initially thought it would be like revealing private things...but later, I felt it as a support system.”

Theme 9: Perceived Usefulness and Suggestions

Almost all participants expressed a belief that gratitude journaling could benefit others, especially those struggling with emotional regulation or daily stress. Some mentioned it might not be universally applicable, but could be helpful to people valuing *mental health*, or needing to *slow down and reflect*.

“for those who say that they don't know how today went off so quickly.”

“For people who are struggling and finding hard to analyse oneself will surely recommend this.”

“it might help them to reduce their stress levels”

“I would recommend this activity to someone else, since this activity has been truly a space for pouring out our emotions in a free way.”

A few also offered *suggestions* to improve the intervention, including adding *more variety* in prompts, covering *mental and physical health*, and ensuring *follow-up* and *emotional check-ins*

Together, these themes reflect that while gratitude journaling was not without challenges, it brought about emotional upliftment, inner peace, and increased self-awareness in many participants. Despite some practical barriers, the overall experience was perceived as meaningful, with several participants showing motivation to continue and recommending it to others

Table 10

Summary of Thematic Analysis of Qualitative Feedback

Sl. No.	Theme	Purpose
1.	Emotional Upliftment	<ul style="list-style-type: none"> • Joy, • lightness, • positivity
2.	Restoration & Emotional Regulation	<ul style="list-style-type: none"> • Calm, • grounding, • satisfaction, • better sleep

- | | | |
|----|----------------------------------|---|
| 3. | Self-Awareness and Reflection | <ul style="list-style-type: none"> • Mindfulness, • self-attunement, • memory recall |
| 4. | Growth Through Challenge | <ul style="list-style-type: none"> • Struggles, • vulnerability, • emotional processing |
| 5. | Gratitude and Perspective Shift | <ul style="list-style-type: none"> • Expressed gratitude, • appreciation, • internal change |
| 6. | Practical Barriers to Engagement | <ul style="list-style-type: none"> • Stress, • time, • forgetfulness, • disengagement |
| 7. | Motivation & Continuation Intent | <ul style="list-style-type: none"> • Willingness to continue, • journaling as expression, • internal drive |
| 8. | Perceived Usefulness for Others | <ul style="list-style-type: none"> • Who it helps and why |
| 9. | Suggestions for Improvement | Ideas to enhance content, design, follow-up, and mental health integration |
-

Interpretation

The thematic analysis of participant feedback revealed rich and multifaceted insights into the emotional, cognitive, and behavioral effects of gratitude journaling among UPSC aspirants. A key outcome was the emotional improvement experienced by many participants, reflected in themes such as *Emotional Upliftment*, *Inner Peace and Contentment*, and *Gratitude and*

Perspective Shift. These themes indicated increased feelings of positivity, calmness, and relief, suggesting that the journaling process created an emotional outlet and fostered a sense of lightness.

Participants also reported greater mindfulness and self-awareness, as illustrated by themes like *Self-awareness and Reflection* and *Reflective Recall*. The act of writing daily encouraged them to reflect on their actions, thoughts, and emotions, helping them become more conscious of the present moment and more appreciative of their environment. For individuals immersed in a high-stress environment like UPSC preparation, these insights may represent a key shift toward better emotional regulation and perspective-taking.

The theme *Growth Through Challenge* added a layer of complexity, as several participants initially found the journaling practice emotionally difficult or personally exposing. Yet, those who continued reported that pushing through discomfort fostered resilience and a sense of achievement. This struggle, though challenging, contributed to their personal growth and deeper engagement with the process.

Themes like *Intrinsic Motivation* and *Perceived Usefulness and Suggestions* revealed that some participants internalized the practice and chose to continue it voluntarily. One participant described gifting themselves a gratitude journal, while others expressed intent to maintain the habit. These expressions demonstrate the internalization of journaling as a meaningful practice.

However, some participants encountered *Practical Barriers to Engagement*, such as forgetting to write or struggling with certain prompts. These experiences show that while the practice was generally beneficial, it may require personalization and structural support to be consistently sustainable.

Discussion

The quantitative findings of this study provide initial evidence that gratitude journaling may be an effective psychological intervention for reducing perceived stress among UPSC aspirants. The experimental group, which engaged in a 15-day gratitude journaling exercise, exhibited a statistically significant reduction in stress levels from pre-test to post-test. This change was supported by the paired samples t-test ($t(8) = 2.614, p = .031$), that the improvement in stress levels was statistically significant and meaningful. Accordingly, the null hypothesis—stating that there would be no significant difference in perceived stress levels before and after the intervention—was rejected.

In contrast, the control group did not demonstrate any significant changes in perceived stress, as indicated by non-significant results from both the t-test ($p = .378$). This suggests that the reduction in stress observed in the experimental group was not due to time-related effects, natural variation, or external factors, but can be reasonably attributed to the gratitude journaling practice itself.

These findings align with prior research that has demonstrated the beneficial effects of gratitude interventions on emotional well-being and stress reduction (Emmons & McCullough, 2003; Wood et al., 2010). Regularly focusing attention on positive experiences and sources of thankfulness may help individuals reframe stressors and develop a more balanced perspective. This is consistent with Fredrickson's broaden-and-build theory of positive emotions (2004), which posits that cultivating positive emotions—such as gratitude—can broaden individuals' momentary thought-action repertoires and build lasting personal resources, including resilience and emotional regulation.

Additionally, the Cognitive Appraisal Theory of Stress (Lazarus & Folkman, 1984) offers a compelling explanation for these results by suggesting that gratitude journaling can influence both primary and secondary appraisals. By shifting focus toward positive

experiences, individuals may reinterpret stressors as less threatening and feel more capable of managing them—thereby reducing perceived stress.

While the within-group improvement in the experimental group was statistically significant, the comparison of post-test scores between the experimental and control groups did not reveal a significant difference ($t(16) = -0.149, p = .883$). This could be attributed to the study's small sample size ($n = 9$ per group), which limits the statistical power needed to detect between-group effects. It is also possible that the duration of the intervention (15 days) was sufficient to induce personal change within individuals but not long enough to generate differences substantial enough to be detected at the group level. Nonetheless, the trend in scores and the direction of change favor the experimental group, suggesting the potential value of the intervention.

The qualitative findings of this study offer rich insight into the psychological and emotional experiences of UPSC aspirants who participated in a 15-day gratitude journaling intervention. The thematic analysis revealed nine overarching themes, which together illustrate how this simple reflective practice facilitated emotional upliftment, cognitive reframing, behavioral consistency, and deeper self-awareness. These findings are consistent with and extend existing literature on gratitude interventions, especially within the framework of positive psychology.

A prominent outcome emerging from participants' narratives was the experience of emotional upliftment, calmness, and relief, captured in themes such as *Emotional Upliftment*, *Inner Peace and Contentment*, and *Gratitude and Perspective Shift*. These findings resonate with the foundational assumptions of the broaden-and-build theory of positive emotions (Fredrickson, 2004), which posits that cultivating positive emotional experiences—such as gratitude—broadens an individual's thought-action repertoire and builds enduring personal

resources. Participants frequently described feelings of joy, better sleep, and emotional lightness, suggesting that journaling served as an emotional release that promoted short-term well-being.

Themes such as *Self-awareness and Reflection* and *Reflective Recall* reflect the cognitive benefits of gratitude journaling. Participants reported becoming more mindful of their surroundings, behaviors, and emotional responses. This aligns with literature suggesting that gratitude practices enhance metacognitive awareness and emotional regulation (Kerr et al., 2015). The process of recalling, articulating, and reflecting on daily experiences appears to have facilitated a shift in participants' internal dialogue, enabling a more appreciative and measured response to external stressors—an important coping resource in the context of UPSC exam preparation. These outcomes also reflect core mechanisms of the Cognitive Appraisal Theory, wherein gratitude prompts more adaptive interpretations of stress and boosts one's sense of control over demanding circumstances.

An equally important dimension of the findings is reflected in the theme *Growth Through Challenge*. Although the intervention was simple in design, many participants acknowledged that it required consistency, honesty, and emotional vulnerability. Some initially resisted the process or found it confronting, but gradually experienced a sense of resilience and accomplishment. This progression is in line with narrative identity theory (McAdams, 2001), which emphasizes how individuals make meaning through story-like reflections, particularly when overcoming internal resistance or challenge. The journaling process, therefore, not only facilitated positive affect but also contributed to the construction of a more adaptive and empowered self-narrative.

The internalization of the journaling habit was another encouraging outcome, evident in the themes of *Intrinsic Motivation* and *Perceived Usefulness and Suggestions*. Several

participants expressed a desire to continue the practice independently, with one even choosing to purchase a gratitude journal as a self-gift. This intrinsic motivation may reflect self-determination theory (Deci & Ryan, 2000), which highlights the importance of autonomy and internal motivation in sustaining behavioral practices. When participants voluntarily extended the habit beyond the study period, it suggested a deeper integration of gratitude into their personal coping repertoire. Moreover, this sustained engagement may reflect the "remind and bind" dimensions of the Find-Remind-and-Bind Theory of Gratitude (Algoe et al., 2008), where gratitude serves to reinforce existing social bonds and foster a sense of connectedness that supports emotional well-being.

However, the study also uncovered important practical challenges. The theme *Practical Barriers to Engagement* revealed that participants faced difficulties such as forgetting to write, time constraints, and occasional difficulty connecting with the prompts. These issues highlight the need for personalization and flexibility in implementing gratitude interventions. As noted in past research (Lyubomirsky et al., 2005), the success of positive psychology interventions often depends on the degree to which they are tailored to the individual's lifestyle, preferences, and readiness for change.

Altogether, the qualitative findings reveal that gratitude journaling—while simple in structure—enabled meaningful emotional expression, personal reflection, and psychological growth among UPSC aspirants. Participants generally perceived the experience as helpful, even transformative, in managing the emotional demands of their rigorous preparation. The emergent themes resonate strongly with established theories in positive psychology and behavioral science, underscoring how thoughtfully designed interventions, even with minimal structure, can foster emotional resilience in high-pressure academic contexts.

Taken together, the quantitative and qualitative findings converge to support the value of gratitude journaling in enhancing emotional resilience and reducing stress among UPSC aspirants. The statistical improvements in perceived stress complement the rich personal narratives of emotional upliftment, deeper self-awareness, and evolving motivation. While the brief intervention did not produce significant between-group differences, it facilitated meaningful psychological shifts within individuals. These findings suggest that gratitude journaling can be a low-cost, low-effort, and scalable strategy for managing stress, especially for individuals preparing for high-stakes, long-duration exams like the UPSC Civil Services Examination. Future studies with larger and more diverse samples, longer intervention periods, and follow-up assessments would help further validate these promising outcomes.

Chapter 5

Summary and Conclusion

Findings

Objective 1: *To evaluate the effectiveness of a 15-day gratitude journaling intervention in reducing perceived stress among UPSC aspirants using the Perceived Stress Scale (PSS)*

The quantitative findings of this study demonstrated a meaningful reduction in perceived stress among participants who took part in the gratitude journaling intervention. Results from a paired samples t-test showed a statistically significant decrease in stress levels from pre-test to post-test ($t(8) = 2.614$, $p = .031$), thereby supporting the rejection of the null hypothesis, which proposed no significant difference. This provides initial empirical support for the potential of gratitude journaling as an effective psychological strategy to manage stress among UPSC aspirants. The observed change in stress levels suggests that the 15-day intervention may have encouraged emotional regulation and cognitive reframing, contributing to an enhanced sense of well-being.

Objective 2: *To compare the perceived stress levels of participants in the experimental (gratitude journaling) group with those in the control group*

Unlike the experimental group, participants in the control group did not show any statistically meaningful change in perceived stress levels ($p = .378$). While the difference between the post-test scores of the two groups was not statistically significant ($t(16) = -0.149$, $p = .883$), this may be due to the relatively small sample size and short duration of the intervention. Nevertheless, the overall trend favored the experimental group, suggesting that gratitude journaling may have contributed to the observed improvements. These results emphasize the importance of further exploration with larger and more diverse samples to better assess the intervention's comparative efficacy.

Research Question: *What are the subjective experiences, emotional impacts, and perceived challenges or benefits reported by UPSC aspirants who participated in a 15-day gratitude journaling intervention?*

The qualitative analysis enriched the quantitative findings by offering insight into participants' lived experiences during the intervention. Nine key themes emerged, reflecting a range of emotional and cognitive transformations. Themes such as *Emotional Upliftment*, *Inner Peace*, and *Gratitude and Perspective Shift* illustrated how participants reported feeling calmer, more hopeful, and more appreciative of their daily lives. These experiences are consistent with Fredrickson's broaden-and-build theory of positive emotions (2004), which posits that positive emotions expand individuals' coping resources and psychological resilience over time.

Further, themes like *Self-awareness and Reflection* and *Reflective Recall* revealed that participants became more mindful and introspective, suggesting that the journaling activity fostered deeper emotional awareness. The theme *Growth Through Challenge* captured how participants, despite initial discomfort or unfamiliarity with the task, experienced personal growth and increased emotional strength as the days progressed.

Additional themes such as *Intrinsic Motivation* and *Perceived Usefulness* reflected the sustained impact of the intervention, with some participants choosing to continue the practice even after the study concluded. However, challenges were also acknowledged under the theme *Practical Barriers to Engagement*, including time constraints and occasional emotional difficulty in responding to prompts. These findings underline the importance of designing flexible and personally relevant interventions, as also emphasized by Lyubomirsky et al. (2005) in their work on positive psychology practices.

Summary

This study explores the effectiveness of gratitude journaling as a psychological intervention aimed at reducing perceived stress and enhancing emotional resilience among aspirants of the Union Public Service Commission (UPSC) Civil Services Examination. These individuals often face prolonged periods of academic pressure, emotional exhaustion, and uncertainty. Situated within the frameworks of positive psychology and expressive writing, the study adopts a mixed-method approach to assess both the measurable impact and personal experiences associated with a 15-day gratitude journaling practice.

Gratitude journaling is increasingly acknowledged as a valuable strategy for supporting mental well-being, especially in high-stress educational environments. Existing research, such as the work of Kaur, Sharma, and Singh (2025), supports its potential to buffer the negative effects of academic stress and foster a more optimistic, reflective mindset. Their findings reinforce the broader understanding that consistently recognizing and documenting positive experiences can contribute meaningfully to psychological wellness.

Quantitative data from this study revealed a significant reduction in perceived stress among participants who engaged in the journaling exercise. A paired samples t-test demonstrated a statistically meaningful decline in stress levels from pre-test to post-test ($t(8) = 2.614, p = .031$), pointing to the effectiveness of the intervention. In contrast, participants in the control group showed no notable change ($p = .378$), suggesting that the improvements observed in the experimental group were not the result of external factors or the mere passage of time. However, a comparison of post-test scores between the two groups did not reach statistical significance ($t(16) = -0.149, p = .883$), which may be attributed to the limited sample size and short duration of the intervention.

The qualitative analysis added depth to these findings, uncovering nine prominent themes that captured the emotional and cognitive shifts experienced by participants. Themes such as Emotional Upliftment, Inner Peace, and Gratitude and Perspective Shift highlighted how the practice fostered feelings of calm, relief, and renewed appreciation. These outcomes resonate with Fredrickson's broaden-and-build theory of positive emotions (2004), which suggests that cultivating positive feelings can broaden an individual's psychological resources over time. Additionally, themes like Self-awareness and Reflection and Reflective Recall pointed to increased mindfulness and deeper emotional insight. Participants described becoming more attuned to their thoughts, actions, and surroundings, suggesting that the act of journaling prompted meaningful internal reflection. The theme of Growth Through Challenge revealed that while some participants initially found the task unfamiliar or emotionally difficult, many ultimately experienced a sense of personal resilience and growth as the days progressed.

Other themes, such as Intrinsic Motivation and Perceived Usefulness, showed that the intervention had a lasting impact beyond the study period, with some participants choosing to continue journaling on their own. On the other hand, Practical Barriers to Engagement brought attention to challenges like time constraints and occasional difficulty connecting with prompts—highlighting the importance of making such interventions adaptable to individual routines and needs. These observations echo earlier findings by Lyubomirsky et al. (2005), who emphasized the role of personalization in the effectiveness of positive psychology practices.

Collectively, the findings suggest that gratitude journaling, while simple in design, can offer meaningful psychological benefits. It served not only as a medium for emotional expression but also as a tool for building cognitive awareness and routine emotional regulation during a particularly demanding period in participants' academic journeys.

Conclusion

This study set out to explore whether a 15-day gratitude journaling intervention could help reduce perceived stress among UPSC Civil Service aspirants—a group that often experiences intense academic pressure and emotional strain. Guided by the principles of positive psychology and expressive writing, the research aimed to (1) assess the effectiveness of gratitude journaling in lowering stress levels using the Perceived Stress Scale (PSS), (2) compare outcomes between an experimental group and a control group, and (3) understand participants' personal experiences with the practice through qualitative feedback.

The quantitative findings offer encouraging evidence. Participants in the experimental group showed a statistically significant decrease in perceived stress from pre-test to post-test ($t(8) = 2.614, p = .031$), supporting the rejection of the null hypothesis, which predicted no difference. Although the post-intervention comparison between the two groups did not reach statistical significance—likely due to the small sample size and brief intervention period—the trend still favored the experimental group.

The qualitative analysis brought these numbers to life. Participants described the journaling process as emotionally meaningful and mentally grounding. Themes such as *Emotional Upliftment*, *Gratitude and Perspective Shift*, *Self-awareness and Reflection*, and *Growth Through Challenge* illustrated how the practice not only offered temporary emotional relief but also encouraged deeper reflection and personal growth. These insights directly addressed the research question, revealing both the emotional impact and the practical challenges of maintaining a gratitude practice.

Notably, several participants expressed a desire to continue journaling even after the study ended, despite time constraints and occasional emotional resistance. This points to the perceived value, internal motivation, and real-world feasibility of the intervention.

Taken together, the findings suggest that gratitude journaling is a simple, cost-effective, and accessible strategy that can support emotional regulation and stress management for UPSC aspirants. While the study's small sample and short duration limit generalizability, the combined qualitative and quantitative evidence presents a strong case for further research using larger, more diverse samples and extended intervention periods.

In conclusion, this study adds to the growing literature on gratitude-based interventions and highlights how small, consistent acts of reflection—like journaling—can foster emotional resilience, especially in high-pressure academic environments.

Implications

The combination of quantitative results and personal reflections in this study highlights how a simple practice like gratitude journaling can have a meaningful impact on the mental well-being of UPSC aspirants. Participants not only reported lower levels of perceived stress but also shared experiences of becoming more emotionally aware and reflective. These outcomes support existing research suggesting that gratitude-based practices can play a significant role in managing stress, particularly in high-pressure academic settings.

Gratitude journaling emerged as a practical, accessible, and low-cost strategy that helped many participants feel more emotionally balanced and intrinsically motivated. Given the long and often emotionally taxing nature of UPSC preparation, coaching centers and institutions could consider incorporating structured journaling exercises into their student support programs. This could involve brief, guided sessions—around 10 to 15 minutes—either at the beginning or end of the day. Providing journals or worksheets with simple prompts such as “Three things I’m grateful for today” or “A challenge I overcame and what I learned” could make the practice easy to adopt and personalize.

The intervention can also be woven into existing mentoring or counseling services, where regular check-ins encourage students to reflect on their progress and emotional states. Life skills workshops and digital wellness modules led by trained facilitators can offer a structured introduction to gratitude journaling as an evidence-based tool for stress management. In situations where daily in-person interaction isn't possible, mobile apps or learning platforms can be used to send prompts and reminders, allowing students to continue the practice independently.

Creating optional peer-sharing circles—where students can voluntarily share their reflections—may foster a sense of community and emotional connection. When mentors and faculty model these practices themselves, it reinforces the value of gratitude in daily life and creates an emotionally supportive academic environment. These simple steps, while not resource-intensive, have the potential to improve emotional resilience, reduce burnout, and support overall well-being—factors that directly influence motivation and academic performance.

Importantly, the benefits of gratitude journaling are not limited to the UPSC context. This practice can also support students in schools and universities, professionals in high-stress fields like healthcare and education, individuals facing mental health challenges or chronic illnesses, and even older adults or those in recovery. Across these groups, gratitude journaling can foster emotional regulation, greater self-awareness, and a sense of meaning. As this study demonstrates, it is a flexible, scalable, and effective strategy that holds promise for promoting emotional balance and mental well-being across diverse settings.

Limitations of the Study

While this study offers valuable insights into the potential of gratitude journaling as a stress-reduction strategy among UPSC aspirants, several limitations must be acknowledged.

A primary limitation lies in the small sample size—only nine participants in each group—which limits statistical power and reduces the generalizability of the findings. The sample was also drawn using non-random methods, transitioning from institutional recruitment to informal networks such as WhatsApp and personal contacts. This introduced sampling bias and restricted the diversity and representativeness of participants. Although 47 aspirants initially responded, many were excluded based on inclusion criteria or unwillingness to commit, and six participants (four due to non-adherence, two citing personal reasons) dropped out, reducing the final sample size to 18.

The study also lacked random assignment to the experimental and control groups. Participants self-selected into groups based on willingness, which may have introduced selection bias. Those opting into the intervention may have been more motivated or psychologically prepared, potentially influencing the results. Moreover, without a placebo or alternative activity for the control group, and with participants aware of their group assignments, the risk of expectancy effects and reactivity cannot be ruled out.

The 15-day duration of the intervention, although sufficient for initial effects to emerge, may not capture the long-term impact or sustainability of gratitude journaling. Additionally, no follow-up data were collected to assess whether the benefits observed were maintained over time. This limits understanding of the intervention's durability.

Another important consideration is the reliance on self-reported data, particularly the Perceived Stress Scale (PSS), which was adapted to a 15-day frame rather than the original one-month reference. This modification may have implications for the reliability and validity of the scale in this context. Moreover, responses were collected through Google Forms, which—while efficient—may limit depth and engagement compared to in-person methods. The emotionally charged period during which data were collected (post-UPSC prelims) could

also have influenced participants' stress levels and how they interacted with the journaling practice.

On the qualitative front, while the written feedback added richness to the findings, the variation in length and detail of responses introduced inconsistency. Unlike interviews, this format offered limited opportunities to probe deeper or clarify responses, and the thematic analysis remained interpretive in nature. Furthermore, participants' consistency, emotional investment, and daily engagement with the journaling activity were not systematically tracked, which may have influenced the outcomes in ways not fully captured by the study.

Lastly, the sample was drawn from a specific demographic—UPSC aspirants from a particular region in India—making it difficult to extend the findings to broader populations or other student groups under academic stress.

Suggestions for further Research

To build upon the current findings and address the limitations encountered, future research could adopt several strategies to enhance the validity, depth, and generalizability of outcomes related to gratitude journaling interventions among UPSC aspirants and similar populations.

First, future studies should consider recruiting larger and more demographically diverse samples. The small, region-specific sample used in the current study limits generalizability; therefore, engaging aspirants from varied geographic, institutional, and socioeconomic backgrounds would allow for more representative conclusions.

Second, to strengthen internal validity, random sampling and random assignment to experimental and control groups is recommended. Self-selection into groups, as seen in the current study, may introduce motivational or psychological biases. Additionally, including a

placebo or alternative intervention for the control group could help isolate the specific effects of gratitude journaling and reduce expectancy-related confounds.

Third, the duration of the intervention could be extended. A 15-day timeframe, while practical, may not adequately reflect the intervention's long-term impact. Longer interventions with follow-up assessments (e.g., after one month or three months) would provide insight into the sustainability of the observed benefits, particularly in managing chronic stress during prolonged exam preparations.

Further, methodological enhancements could strengthen the reliability of findings. For example, researchers might use psychometric tools validated for shorter timeframes or adopt multi-method assessment strategies—combining self-reports with behavioral observations, physiological stress markers, or daily check-ins to track engagement and adherence.

On the qualitative front, future studies could benefit from in-depth data collection methods, such as semi-structured interviews or focus group discussions, to allow for probing and clarification of participants' experiences. This would help uncover subtle psychological and emotional processes that may not emerge through written feedback alone.

Additionally, examining the influence of individual differences—such as baseline stress levels, personality traits, prior exposure to reflective practices, or motivation for civil service—could yield valuable insights into who benefits most from gratitude journaling and under what conditions.

Future research could also explore the integration of gratitude journaling into institutional mental health programs or coaching center routines, assessing its feasibility, engagement levels, and outcomes when embedded within real-world academic structures. Moreover, comparative studies evaluating gratitude journaling alongside other evidence-based

stress-reduction techniques (such as mindfulness, progressive relaxation, or cognitive restructuring) could determine its relative and synergistic effectiveness.

Finally, replicating similar studies in other high-stakes academic or professional contexts—such as NEET, CAT, or GATE aspirants—would help establish the broader applicability of gratitude journaling as a supportive psychological intervention.

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Appendices

Pretest form presentation to the participants through Google Forms

Welcome!

You are invited to take part in a psychological study on Daily reflections and Academic wellbeing among UPSC aspirants.

This form includes:

- Informed Consent
- Basic Demographic Questions
- A short questionnaire about your stress levels

Your participation is voluntary and confidential. You may withdraw from the study at any time without any negative consequences.

If you choose to participate, you will be randomly assigned to one of two groups. Further instructions will be provided through a WhatsApp group you are assigned to.

Details about the specific activities (such as journaling or short surveys) will be shared after group assignment. This approach is taken to reduce potential bias and maintain the validity of the study.

Informed Consent

Do you agree to participate in this study under the conditions described above?

A. Yes, I consent to this study

B. No, I do not consent

Demographics

1. Name
2. Age
3. Gender
 - A. Male
 - B. Female
 - C. Other
 - D. Prefer not to say
4. Place of residence
5. At which institute are you currently studying?
6. Number of upsc attempts (including this year)
7. Whatsapp number

Perceived Stress Scale

This study focuses on a 15-day period, so please answer the following questions based on your feelings and experiences over the last 15 days.

In each case, you will be asked to indicate how often you felt or thought a certain way.

Although some of the questions are similar, there are differences between them and you should treat each one as a separate question.

The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way; rather indicate the alternative that seems like a reasonable estimate.

There are no right or wrong answers—just respond as honestly as possible.

For each question choose from the following alternatives:

0 - never

GRATITUDE JOURNALING AND PERCEIVED STRESS

1 - almost never

2 - sometimes

3 - fairly often

4 - very often

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and stressed?
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month, how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that happened that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?