The International Journal of Indian Psychology
ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print)
Volume 14, Issue 2, April- June, 2026
DIP: 18.01.072.20261402, DOI: 10.25215/1402.072
https://www.ijip.in

Research Paper

The Effect of Anapanasati Meditation on Resilience and Compassion among Regular Meditators

Sumanjeet Kaur[1]*, Ms. Nidhi Jain[2]

ABSTRACT

The modern world stresses its people with long-term stressors, which has heightened the academic focus on contemplative practice, said to promote adaptive psychological potential. One of these methods is Anapanasati meditation, which is the breath-regulated marker of mindfulness training; nevertheless, the empirical data about the connection between a long-term practice and resilience and compassion has been limited to a group of experienced meditators. The current investigation was on whether the time spent in Anapanasati can predict resilience and compassion and on the relationship between the constructs. We sampled 200 regular meditators in cross sectional survey. The respondents answered the Brief Resilience Scale and the Santa Clara Brief Compassion Scale. The analysis of relationships with practice duration was done using Pearson correlation analyses and group comparisons. There was a positive correlation between resilience (r =.22) and compassion (r =.23) and longer practice duration. There was moderate correlation between resilience and compassion (r 0.40). The scoring of practitioners with over two years of experience was higher than that of those having less years of experience in the practice, and thus there is relationship of a graded association that is in correspondence with cumulative training effects. These results imply that longer-lasting Anapanasati practice can maintain stress recovery and prosocial orientation at the same time, and in that way, it can be provisioned to be an integrated mechanism to achieve psychological well-being.

Keywords: *Anapanasati meditation, psychological resilience, compassion, mindfulness, emotion regulation, prosociality, contemplative intervention*

Modern cultures can be described as being characterized by an increasing speed of demand, ongoing ambiguity and increasing exposure to psychological challenge. In workplace, educational, and communal contexts, people must be very quick in adapting to change and at the same time, they have to remain emotionally stable and socially operational. These reasons have provoked an active scientific investigation into the causes which not only enable individuals to withstand a crisis, but also to revive, improve, and be open to others. However, instead of just looking at pathology, the current psychological studies have increasingly moved on to looking at trainable internal resources that enhance adaptive functioning and sustainable wellbeing (Seligman & Csikszentmihalyi, 2000).

[1]Department of Psychology, Chandigarh University
[2]Department of Psychology, Chandigarh University
*Corresponding Author

Received: March 12, 2026; Revision Received: April 30, 2026; Accepted: May 02, 2026

Resilience and compassion have been given special focus in this movement, since these two capacities define opposite strengths: one enables one to successfully self-manage in the presence of challenging circumstances; the other helps one to positively interact with the social environment (Kuzman et al., 2012; Mayer et al., 2014).

Meditation has been found as a good avenue towards nurturing these resources. Contemplative practices are applied nowadays and thoroughly examined using empirical and neuroscientific paradigms, though this research area has a long-standing history that is rooted in religious or philosophical traditions. There is accumulating evidence that meditation is capable of altering attentional mechanisms, improving emotional regulation, and increasing meta-awareness of internal states (Tang et al., 2015; Tang & Posner, 2013).

By means of constant practice, people can become more mentally stable, less reactive and more flexible in their ability to respond to stressors (Lazar et al., 2005a). The mechanisms refer to psychological resilience which depends on how well a person recovers following a disruption, and compassion, which depends on the ability to be open and caring without becoming overwhelmed (Kazdin, 2015a). As a result, meditation is being increasingly also theorised as an order of mental training rather than a type of relaxation training and this has the potential to enhance intrapersonal as well as interpersonal functioning.

Among the variety of contemplative techniques which have nowadays been developed, there is Anapanasati meditation that takes up a unique place. Based on a long-term practice of being conscious of the natural breath, the method trains the practitioners to stabilize attention, see experience clearly as well as slowly lessen automatic patterns of reactivity. Since the practice is based on the presence of a constantly available object, i.e., the breath, it is comparatively easy to learn, does not require a significant amount of infrastructure, and can be applied in both cultural and community contexts. This has enhanced its use with the increase to loved ones since its availability has encouraged more lay practitioners to practice regularly and on longterm basis and not necessarily within the clinical programmes. Though there is this expansion, scientific studies have increasingly studied heterogeneous mindfulness interventions, or short-term trainings, but not individuals who make Anapanasati a lifelong practice (Goyal et al., 2014).

Resilience is generally referred to as the capacity to come back to stress and adversity (Smith et al., 2008a). According to the modern research, becoming resilient does not only mean to face the disturbance but to undergo the dynamic mechanisms of adapting, controlling, and restoring the balance (Tugade & Fredrickson, 2004a). Highly resilient individuals are more likely to recover functional stability faster, have fewer long-lasting negative implications, and goal-oriented behaviour even in times of difficulty. These are highly associated with life satisfaction, occupational effectiveness, and mental health. Significantly, resilience is viewed as alterable as well. Emotional awareness, attentional control and cognitive flexibility have been said to contribute to faster recovering after stress and thus the contemplative practices are theoretically valuable in its development (Kazdin, 2015b).

Compassion on the other hand portrays the sympathy to the pain of others alongside the desire to eliminate it (Goetz et al., 2010). It goes beyond empathy and involves warmth, concern and prosocial intention (Bold et al., 2013). The compassion is a contributor to the quality of relationships, cooperative behaviour and collective well-being, as well as shields against hostility and social fragmentation (Nelson et al., 2014). According to psychological

models, compassion must have emotional balance: people need to be exposed to distress without evading it but must not become personally distraught (Weng et al., 2013). The stability and clear-minded training can thus be of significant relevance towards compassionate responding.

When resilience and compassion are thought of as a whole, it provides a very instructive view of how changes take place. The resilience to overcome the problem of personal distress can free up mental and emotional data, making more resources form available to others. In contrast, the prosocial orientation has the capacity of enhancing meaning and connectedness, which are identified to be resilience-strengthening factors (Tugade & Fredrickson, 2004a).

Meditative practices that perfect self-regulation may thereby enhance an integrated type of development where individual strength and how one relates to other people develop together. Very little empirical investigation has been done on this connection, but is particularly sparse when confined to situations relating to structured interventions.

A number of literature gaps are observable. Most of the current studies integrate more than one contemplative practice making it difficult to trace the results of certain practices. Most studies target the beginners or people who have joined time limited programmes leaving out the impacts of long-term and naturalistic participation underexplored (Goyal et al., 2014).

Moreover, resilience and compassion are rarely studied together in the same sample of practitioners, although studies into these two concepts seldom focus on how the experience gained throughout the career can influence either of the two. Isolated Anapanasati meditation research, regular practitioner research, and duration-related gradients is especially in short supply.

The need to fill such gaps can help understand whether long-term participation in one, scalable practice is linked with substantial psychological benefits. The current research hence sought to investigate resistance and development of individuals who engage in regular practices of Anapanasati meditation. The main goal was to determine the degree of resiliency and compassion among this group of people. The secondary aim was to assess the positive links between the length of practice in meditation to resilience and compassion, the positive links between resilience to compassion, and the positive links between the length of longer-term experience and the higher rating of the practitioners with shorter-term histories.

LITERATURE REVIEW

1. Mindfulness, Anapanasati and Meditation

Empirical interest in meditation has grown significantly in the last three decades thus changing meditative practices that had been the preserve of contemplation traditions into high-caliber topics of psychologic and neuroscientific studies. Initial randomized studies showed that systematic mindfulness interventions had the potential to greatly decrease apparent stress levels and the ability to cope in both clinical and general populations and therefore claims meditation as an effective behavioral health intervention (Keng et al., 2011a). Further studies have narrowed down on this view to extrapolate attentional regulation as a central form by which meditation produces its effects. Momentary experience may be valuable, whether deliberate or accidental, in enhancing executive functioning, reducing distraction and creating cognitive stability (Lieberman et al., 2025).

Studies also reveal that meditation increases regulatory functions of emotions. Practitioners are less responsive to negative stimuli, and they quickly get back to their basal states after perturbation, and monitor affective states. Neuroimaging research can be applied in conjunction with behavioral evidence to demonstrate both functional and structural changes in brain areas involved in learning, memory, and self-regulation, and can thus indicate that repeated practice of contemplative practice can be experience-induced neuroplasticity. These adjustments go hand in hand with training models when the mind is increasingly more efficient in stress response modulation (Hooi et al., 2025; Wu et al., 2019).

In addition to regulatory benefits, it has been associated with more widespread wellbeing effect, such as positive affect, life satisfaction, and openness to others. Notably, comparative studies that have been conducted between beginner and practicing practitioners indicate that with practice, they enhance gains, a concept that implies the dose-response interaction. The people who participated in long-term training often show increased attentional stability and have enhanced emotional stability over beginners hence confirming the perception that meditation is a more of a developmental process and not a one-time intervention (Basu et al., 2025; Nicolaides & Chrousos, 2025).

Although significant advances have been achieved, much of the literature moves all the various techniques into one large category of mindfulness that makes it difficult to isolate the effect of one particular form of approach like Anapanasati. In addition, most studies are based on short interventions conducted in both clinical and laboratory environments, and few studies address the everyday practitioners. Therefore, despite the positive psychological outcomes of empirical research, there are not many studies in which sustained practice of Anapanasati meditation is explicitly related to any established constructs, including well-being and compassion.

2. Resilience

Resilience has come to refer not as a notation of trait of invulnerability, but as a multidimensional term that predestines adaptive recovery and positive functioning in adversity. The modern theorists define resilience as a dynamic process that is characterized by interplay of cognitive, emotional, and social resources. Instead of suggesting lack of suffering, resilience is the ability to regain balance and keep on achieving relevant objectives after being interrupted.

Empirical studies point out a number of the protective processes underlying resilient outcome. This can be prevented by effective emotion regulation, flexible appraisal and attentional control, which allow individuals to be able to face challenges and not stress out due to chronic overwhelm. Adaptive coping is further reinforced by social connectedness and perceived meaning and this demonstrates that resilience is a result of synchronized internal and external supports. This systems approach has expanded the scope of intervention strategies whereby researchers have been advised to find out skills, which can be reinforced through training (Keng et al., 2011b; Phan et al., 2022).

Mental health is closely related to resilience. The greater the resilience levels, there are less anxiety and depression, quicker recovery after stress, better occupational performance. These results have inspired resilience to be enhanced in a proactive nurturing way instead of in response mode. Cognitive reframing, emotional awareness, and self-regulation programs prove that resilience-related skills are indeed able to be trained with the help of systematic practice (Calderone et al., 2024).

Mindfulness is one of the candidates in this field. Meditation can also help in recovery after negative events, as it can stimulate faster after a negative experience due to the nonreactive awareness and the stabilization of attention. There are even signs of overlap in the results of preliminary studies that report that individuals who report more mindfulness also display stronger resilience. However, studies have hardly analysed the ways the duration of a particular contemplative practice influences resilience to dedicated meditators. More explanation of engagement on longer term basis is hence justified. Generally, the current available knowledge is indicating the possibility that meditation can reinforce adaptive recovery mechanisms (*Amishi Jha - Wikipedia*, n.d.; Matiz et al., 2020; Stanley & Jha, 2009).

3. Compassion

In psychological explanations of altruism and group welfare, compassion has a leading role to play. Compared to empathy, which is the sharing of another person of an affective condition, compassion includes the element of motivation that is aimed at reducing the suffering. This orientation has been associated with defensive liaisons, collaborative relations and less violence, which has reinforced its relevance in healthy communities.

Some findings show that compassion is beneficial to recipients and people demonstrating it. People who are highly compassionate have their life meaning, emotional wellbeing, and burnout levels lower. Prosocial activity seems to strengthen positive identity and connectedness and thereby protects against isolation and stress. These results have prompted a study among researchers on whether compassion can be developed deliberately (Guendelman et al., 2017; Keng et al., 2011b).

It has been proven through experimental research that compassionate responding can be enhanced through targeted training. Often, participants who are subjected to brief interventions are more willing to help strangers and to be sensitive to need. The neuroscientific discovery includes intensity of activity in networks that are linked to affiliation and reward, which elucidates the presence of biological instances supporting compassionate motivation. The combination of these findings threatens the belief that compassion is absolute and by doing this, the assumption can only be described as being flexible (De Filippi et al., 2022; Wu et al., 2019).

Meditation has been put forward as one of the ways in which compassion can be cultivated. Although practices based on loving-kindness have been specifically described to support prosocial affect, other attention-based approaches can likewise be of indirect assistance, improving emotional balance and minimizing self-rumination. People who are not overrun with their own suffering can have more ability to perceive and react to others. Nevertheless, there is a relative lack of empirical evidence connecting breath-based methods like Anapanasati with compassion, especially when the long-term followers are involved. It is therefore reasonable to believe that the other-oriented capacities might be developed through attentional training, though regular evidence is still on the way (Keng et al., 2011b).

Literature Synthesis and Conceptual Framework

All three sets of inquiry imply a fluid developmental process. Meditation enhances control of attention and management of emotions; these externalities enable quicker absolution of stress, which is the hallmark of defiance. The greater the stability and less reactive an individual, the more the cognitive and affective resources at their disposal may have time to

participate in interpersonal interaction and in this manner generate compassion. The length of practice can enhance each stage by strengthening acquired regulatory patterns.

Little studies have been undertaken that did look at resilience and compassion among committed Anapanasati meditators or tried to determine whether increased experience is associated with increased resilience and compassion. Explaining this development can shed light on the view of how intrapersonal regulation is converted into interpersonal sensitivity. The conceptual model being tested in the present study is thus that meditation duration in an individual has a contribution to emotional regulation which in turn contributes to resilience in the end resulting in better compassion.

Research Gap

- Empirical studies often combine several methods of meditation or mindfulness and, as a result, the separate psychological impacts that can be accredited to Anapanasati practice are not identified.
- Much of the literature is founded on inexperienced participants or short-term intervention programmes, whereas those instructed in meditation to use it on a regular basis during long periods of time are viewed as the counterargument.
- The amount of empirical information going off of naturalistic and community-based practitioners is relatively small as compared to the information that is received of laboratory or clinical cohorts.
- Resilience and compassion are normally studied separately; there are few studies that established the relationship between the two constructs on the same population.
- The role of practice duration (dose–response or cumulative training effect) has not been adequately tested, despite theoretical claims that longer engagement should produce stronger outcomes.
- The gap in the research is that the studies reviewed have not analyzed the possibility of simultaneously improving intrapersonal strengths (resilience) and interpersonal orientations (compassion) using breath-oriented meditation.

Table 1: Literature Review

Authors & Year	**Sample / Context**	**Focus**	**Key Findings**	**Relevance to Present Study**
Meditation / Mindfulness				
Kabat-Zinn (1990).	Medical patients	Mindfulness training	Reduced stress & distress	Shows meditation strengthens regulatory capacity
(Lutz et al., 2008)	Expert meditators	Attention	Greater attentional stability	Mechanism for resilience growth
(Lazar et al., 2005b)	Long-term practitioners	Brain structure	Cortical thickening	Supports cumulative duration effect
(Hölzel et al., 2011)	MBSR participants	Neural change	Improved emotion regulation	Explains pathway to outcomes
(Zeidan et al., 2010)	Adults	Brief meditation	Better mood & cognition	Even limited exposure helps
(Tang et al., 2007)	Students	Integrative training	Reduced stress	Foundation for resilience link

Authors & Year	Sample / Context	Focus	Key Findings	Relevance to Present Study
Resilience				
(Smith et al., 2008b)	Scale validation	Bounce-back ability	Reliable measure	Your tool basis
(Bonanno, 2004)	Trauma survivors	Adaptation patterns	Resilience common	Frames recovery concept
(Masten, 2001)	Developmental research	Ordinary magic	Resilience developable	Supports training idea
(Tugade & Fredrickson, 2004b)	Adults	Emotion	Positiveaffect speeds recovery	Mechanism linking meditation
(Nabors, 2017)	Employees	Mindfulness program	resilience	Direct empirical support
(Bomhof-Roordink et al., 2015)	Review	Training	Resilience can be built	Supports duration hypothesis
Compassion				
(Singer et al., 2004)	Neuroscience	Empathy for pain	Affective neural base	Prosocial emotional base
(Nelson et al., 2014)	Neuro studies	Empathy vs compassion	Different systems	Shows compassion protects wellbeing
(Goetz et al., 2010)	Emotion science	Definition	Motivates helping	Conceptual clarity
(Weng et al., 2013)	Adults	Training	altruism	Compassion trainable
(Bold et al., 2013)	Intervention	Self-compassion	wellbeing	Shows modifiability
(Lim et al., 2015)	Meditation	Prosociality	helping responses	Suggests indirect path

Rationale of the Study

The increasing weight of stress, emotional fatigue and social alienation has increased scholarly attention to those interventions that generate lasting psychological strengths as opposed to alleviating pathology. There is an increased conceptualization of meditation as a type of mental training that can enhance regulatory skills that promote individual adjustment as well as interpersonal operation. However, it needs strong evidence to prove that being able to continue with certain practices like Anapanasati does have a demonstrable relationship with resilience and compassion in ordinary students.

The current research will be useful due to various theoretical and practical reasons.

- Originally, it is compatible with the trend of preventive psychology as it analyzes the variables capable of protecting individuals against future stress.
- Second, the scientific results can be applied to the training and curriculum interventions modelling the systematic achievement of emotional stability and prosocial orientation.
- Third, organizations in education and employment are in need of affordable, easily available, and scalable approaches to facilitate better coping abilities and relational climate.

- Fourth, the research is relevant to contemplative science, the authors separate a breath-based attentional practice approach and do not confuse several types of meditation.
- Fifth, the concentration on the regular, long-term practitioners allows looking at cumulative effects or effects in terms of duration.
- Sixth, a scientific study of a Indian-origin meditative methodology with standardized psychological tests offers the integration of the conventional wisdom and modern empirical studies.
- Lastly, by exploring the relationship between resilience and compassion simultaneously, the research contributes to the knowledge about the possibility of meditation to develop an analogous pattern between inner strength and outward care-these are the two key components of psychological well-being.

Hypotheses

Based on the available theory, as well as previous research findings, hypotheses that were tested by the study consisted of:

- **H1:** Anapanasati meditation practice duration has a positive relationship with resilience.
- **H2:** There is a positive correlation of Anapanasati meditation practice in terms of duration of practice with compassion.
- **H3:** Resistance has a positive correlation with compassion amongst routine practitioners.
- **H4:** Individuals with longer durations of meditation practice will report higher levels of resilience and compassion compared to those with shorter durations.

METHODOLOGY

Research Design

The proposed study had a cross-sectional, quantitative, correlational research design. The researchers aimed at investigating whether there is a relationship between naturally occurring variability in the duration of Anapanasati meditation practice and psychological resilience and compassion difference. Considering that participants were practitioners themselves, it was neither possible nor ecologically appropriate to run such an experimentally manipulated study or randomly assign participants. Rather, the design allowed testing actual world contemplative activity and its psychological equivalent.

Cross-sectional design, especially, is very common in the studies in the field of contemplative and positive psychology conducted when the aim to be fulfilled is to define the pattern of association, possible dose-response relationship, and group difference by experience levels.

The study design enabled it to:

- test linear liaisons among length of practice and results,
- establish co-varying of resilience and compassion,
- compare practitioners within exposure groups,
- produce the evidence, which could be used in training and preventive uses.

Participants

Sample Size:

The last sample under some analysis included 200 adults. This size is adequate for:

- correlation analysis,

- group comparisons,
- consistent determination of psychological connections.

Recruitment: The participants were recruited by employing the community outreach into the meditation networks and digital distribution among individuals conversant with the practice of Anapanasati. It was a voluntary and unpaid participation. This plan was used to make sure the inclusion of naturalistic practitioners as opposed to those who were driven by the laboratory incentive.

Inclusion Criteria:
Participants were eligible if they:

- stated experience with Anapanasati meditation,
- were capable of interpreting survey questions,
- provided informed consent. Exclusion / Screening:

Responses were screened for:

- missing scale data,
- inconsistent entries,
- lack of exposure to meditation. Participant Diversity:

The sample included:

- multiple adult age bands,
- both men and women,
- children and adults in the workplace,
- participants belonging to diverse geographical areas.

This type of heterogeneity enhances its generalizability and the actual diffusion of meditation practice.

Measures
Choice of validated and short instruments was taken to minimize the cost imposed on the participants and also ensure psychometric rigor.

Resilience:
The Brief Resilience Scale created by Bruce W. Smith and others helped in determining resilience. Based on the capability of overcoming stress, the scale is related with the exact theoretical definition that determines the current study.

Structure:

- 6 items
- Likert response format
- Includes reverse keyed entries. Scoring:
- Reverse items recoded
- Sum/average responded questions.
- Where the value is larger, it means the greater the resilience. Psychometric propertie:
- Good reliability
- Stable factor structure
- Confirmed in community and health samples.

Compassion:
Compassion was measured using the Santa Clara Brief Compassion Scale, created by Julie Y. Hwang, Thomas G. Plante, and Kevin Lackey. The scale captures emotional concern and warmth toward others, including unfamiliar individuals, consistent with contemporary definitions of prosocial orientation.

Structure
- 5 items
- Likert responses
- Unidimensional construct scoring:
- Items summed
- A increased score implies more compassion. Advantages:
- Short administration time
- High application in reflective research.
- Appropriate with non-clinical populations.

Table 2: Instrument Summary

Variable	Measure	Items	Construct Captured
Resilience	Brief Resilience Scale	6	Stress recovery
Compassion	Santa Clara Brief Compassion Scale	5	Concern for others

Variables of Meditation Practice
To test dose-response hypotheses, subjects gave reports:
- duration of practice (e.g., less than 6 months, 1-2 years, more than 2 years),
- frequency (daily, weekly, etc.),
- typical session length.
- Duration was the major predictor in the test of hypothesis.

Procedure
Upon the survey link access, the participants:
- reviewed study information,
- provided consent,
- filled demographic and meditation history questionnaires,
- completed measures of resilience and compassion.

The survey took a time of about 10-15 minutes. Any participant was allowed to discontinue without any fine.

Ethical Considerations
The research abided by the general principles of ethical behavioral research. The contribution was at will. No deception was employed. The information was gathered anonymously. There were academic uses of responses. Since the measures were related to the most basic psychological experiences as opposed to clinical risk, it was expected that the harm would be minimal.

Statistical Analysis Plan
To evaluate hypotheses, analyses were structured as follows:

Table 3: Statistical Analysis Plan

Hypothesis	Statistical Strategy
H1	Correlation between duration & resilience
H2	Correlation between duration & compassion
H3	Correlation between resilience & compassion
H4	Group comparison across duration levels

Experimental Setup

Dataset Description:

The current research described a structured survey data retrieved among the people involved in Anapanasati meditation. Data were collected by means of an online survey that was formulated specifically to elicit demographic factors, meditation experience and through standard psychometric practices on measures of resilience and compassion.

The dataset brings smiles to the ecological validity heroic by sampling real practitioners rather than volunteering researchers, and also allows the researcher to study naturally occurring differences in contemplative engagement.

Dataset Characteristics:

- Observational, non-experimental
- Cross-sectional
- Self-report format
- Community-based sample
- Both predictor and outcome variables are included Variables Captured:

The dataset contained three primary categories of variables: Demographic

- Age group
- Gender
- Occupation
- Location Meditation Practice:
- Duration of engagement
- Frequency
- Average session length Psychological Outcomes:
- Resilience score
- Compassion score Variables:

Independent Variable:

- Duration of Anapanasati meditation. Dependent Variables:
- Resilience
- Compassion Exploratory
- correlation of resilience and compassion.

Table 4: Dataset Description

Attribute	Description
Total records	200
Data source	Online survey (Google Form)
Population	Anapanasati practitioners
Missing data	Screened prior to analysis
Nature	Quantitative

Data Preparation:
To make data integrity, a number of preparation procedures were undertaken before statistical analyses were undertaken.

These included:
- verification of consent
- elimination of unfinished records.
- negative wording of resilience items was reversed scored.
- calculation of the cumulative scale scores.
- coding of duration categories

Group Formation for Comparative Tests:
In hypothesis H4, the participants were grouped based on meditation exposure (e.g., shorter and longer duration). This allowed assessment of whether a length of practice is related to greater adaptive results.

Groupings of common logic consisted of:
- Less than 6 months
- 1–2 years
- More than 2 years Analytical Environment:

The standard quantitative procedures suitable in the psychological research were used to carry out statistical analyses.
The workflow included:
- descriptive statistics
- correlation estimation
- comparison across duration groups

RESULTS

Descriptive Statistics

Conducted descriptive-level analyses to summarize aggregate resiliency and compassion levels among the sample of Anapanasati practitioners. The scores showed a relatively moderate to high functioning in both constructs.

Table 5: Descriptive Statistics of Main Variables (N = 200)

Variable	Mean	SD	Minimum	Maximum
Resilience	22.97	3.93	13	30
Compassion	29.69	6.61	5	35

Participants, on average, reported strong perceived ability to recover from stress & high levels of compassionate concern toward others.

1. H1- Resilience and Duration of Practice

It was hypothesized that longer engagement in Anapanasati meditation would be associated with higher resilience.
A Pearson correlation demonstrated a significant positive relationship between duration & resilience:
$r = .22$, $p = .002$
H1 supported.

2. H2- Practice time and Compassion

The second hypothesis assumed that meditation duration would have a positive linkage with compassion. The outcome once more indicated a significant positive relationship.

$r = .23$, $p = .001$

Longer-term practitioners expressed greater concern & care toward others.

H2 supported

3. H3 Relationship between Resilience and Compassion

The third hypothesis was that more resilient persons also would demonstrate higher compassion. The effect that turned out to be the strongest in the research was this relationship.

$r = .40$, $p = .001$

Practitioners who perceived themselves as better able to recover from stress also tended to report markedly higher compassionate orientation.

H3 strongly supported

4. H4 - Duration Group differences.

In order to assess the positive results, depending on the length of the history of meditation groups of participants were organized based on the duration: less than 6 months; 1 2 years; more than 2 years.

Table 6: Mean Scores by Practice Duration

Duration	Resilience Mean	Compassion Mean
Less than 6 months	20.58	25.71
1–2 years	22.84	29.28
More than 2 years	23.44	30.53

A clear upward pattern is visible. Statistical Tests

- Resilience: $F = 5.66$, $p = .004$
- Compassion: $F = 5.79$, $p = .004$

Individuals with longer practice histories demonstrated significantly higher scores.

H4 supported.

DISCUSSION

Overview of Findings

The current paper has tested the hypothesis on the relationship between the length of Anapanasati meditation practice time and psychological fitness and compassion in regular Anapanasati/Byahahlian. The empirical support was given to all four hypotheses. Increasing time spent on meditation had a positive correlation on both resilience and compassion; more experienced meditators scored higher than those with less experience and resilience had a strong correlation with compassion. The findings intuit that a long-term breath-based contemplative practice approach could help to institute a composite profile of adaptive functioning featuring an excellent stress recovery and a high prosocial orientation.

Why Duration Matters

The graded relationship between the length of a practice and the psychological outcomes is one of the most important of the study. Those with over two year's experience also indicated improved resiliency and compassion than short duration exposure. This trend is in line with the notion that meditation is a training modality and not a single intervention. There are a

number of mechanisms which can be claimed to account to cumulative effects: helpful attentional regulation becoming increasingly strengthened; automatic reactivity becoming increasingly reduced; building up of adaptive coping patterns; emotional balance being increasingly stabilized. With age, the processes can be condensed into stable psychological reserves. The results thus confirm conceptual statements that the advantages of contemplative practice increase with time of application.

Correlation Results between Resilience and Compassion

The most significant statistical relationship observed in the study was the response of resilience and compassion. The practitioners who felt better in their ability to recover the stress were also more apt to show concern towards others. The relation can indicate a significant developmental principle: when people are not so much distracted with their distress, they may have a bigger ability to pay attention to the distress of other people. At least emotional security may provide cognitive and motivational resources to be used in prosocial engagements. Instead of being different phenomenal results, resilience and compassion can interact with one another in a manner akin to the two elements of adaptive maturity.

Correlations with Past Literature

The results align with other studies that meditation improves the management of emotions and decreases the responsiveness of the stress. Previous literature has already associated mindfulness with resiliency and, independently, with compassion responding. The current findings build on this body of knowledge by indicating that these strengths co-exist among ordinary Anapanasati practicers and that they alter predictably with experience of practice. Notably, a lot of past research has been done on short-term programs or combined methods. Through the analyses of participants using a definite breath-based method, the research serves as the better evidence of how the continued attentional training might be converted into the psychological benefits.

Novel Contribution

This study advances contemplative science in several important ways.

- It isolates Anapanasati meditation, avoiding conceptual ambiguity introduced by multi-component interventions.
- It investigates real-world, long-term practitioners, increasing ecological validity.
- It directly tests a duration gradient, an assumption often made but rarely demonstrated.
- It evaluates resilience and compassion together, offering insight into how intrapersonal regulation relates to interpersonal concern.
- By integrating these elements, the study supports a model in which sustained breath awareness practice may cultivate both the strength to withstand adversity & the openness to care for others.

Future Research

Although the current findings help get valuable insight into relationships between Anapanasati meditation, resilience, and compassion, there are a few issues to be pursued in the future. On the one hand, longitudinal designs are required to establish whether rises in resilience and compassion can be observed throughout a period of time in the same individuals. Monitoring of practitioners in months/ years would provide a clear cause direction and clarify the lines of development of contemplative training.

Second, the inference could be reinforced by experimental methods in which the participants are randomly selected and allocated to structured Anapanasati programs.

These designs would assist in separating the effects of meditation among the already existing personality or motivational traits.

Third, physiological and neurocognitive type of indicators can be included to give objective measures of a change in regulation. Heart rate variability, the stress hormone profile or neural indices of attentional control measures would help explain how psychological improvements are implemented biologically.

Fourth, the research in the future must explicitly aim at testing mechanisms that relate meditation to consequences. Indicatively, emotional regulation, attention stability or rumination decreases could be used to mediate the relationships between practice time and resilience and compassion.

Lastly, studies in various cultural and professional situations would improve the generalizability and allow concluding how contemplation skills apply into day-to-day activities in school life, health care, and organizational life.

CONCLUSION

The current research has shown that lifelong Anapanasati meditative practices have been related to resilience and compassion among ordinary meditators. Patients with longer histories of practice had more capacity to overcome stress, were more concerned about others, and they strongly integrated personal stability and interpersonal care.

Concentrating on one distinct form of breath-0based contemplation among a natural community sample, the study is evidence that meditation can serve as a scalable approach to the development of the adaptive strengths of the psyche. The results add to the emerging awareness of the capacity of inner regulation and social responsiveness to be cultivated jointly with the help of systematic mental training.

REFERENCES

Amishi Jha - Wikipedia. (n.d.). Retrieved February 16, 2026, from https://en.wikipedia.org/wiki/Amishi_Jha

Basu, T., Dangwal, P., & Deokar, M. (2025). Effect of Anapanasati Meditation on Thought Patterns and Subjective Well-being Among Orphan Adolescents. *Annals of Neurosciences*, 09727531251326381. https://doi.org/10.1177/09727531251326381

Bold, K. W., Yoon, H., Chapman, G. B., & McCarthy, D. E. (2013). Factors predicting smoking in a laboratory-based smoking-choice task. *Experimental and Clinical Psychopharmacology*, *21*(2), 133–143. https://doi.org/10.1037/a0031559

Bomhof-Roordink, H., Seldenrijk, A., van Hout, H. P. J., van Marwijk, H. W. J., Diamant, M., & Penninx, B. W. J. H. (2015). Associations between life stress and subclinical cardiovascular disease are partly mediated by depressive and anxiety symptoms. *Journal of Psychosomatic Research*, *78*(4), 332–339. https://doi.org/10.1016/j.jpsychores.2015.02.009

Bonanno, G. A. (2004). Loss, Trauma, and Human Resilience: Have We Underestimated the Human Capacity to Thrive after Extremely Aversive Events? *American Psychologist*, *59*(1), 20–28. https://doi.org/10.1037/0003-066X.59.1.20

C. (2020). Positive Impact of Mindfulness Meditation on Mental Health of Female Teachers during the COVID-19 Outbreak in Italy. *International Journal of Environmental Research and Public Health 2020, Vol. 17, Page 6450*, *17*(18), 6450. https://doi.org/10.3390/ijerph17186450

Calderone, A., Latella, D., Impellizzeri, F., de Pasquale, P., Famà, F., Quartarone, A., & Calabrò, R. S. (2024). Neurobiological Changes Induced by Mindfulness and Meditation: A Systematic Review. *Biomedicines 2024, Vol. 12, Page 2613*, *12*(11), 2613. https://doi.org/10.3390/biomedicines12112613

De Filippi, E., Escrichs, A., Càmara, E., Garrido, C., Marins, T., Sánchez-Fibla, M., Gilson, M., & Deco, G. (2022). Meditation-induced effects on whole-brain structural and effective connectivity. *Brain Structure & Function*, *227*(6), 2087. https://doi.org/10.1007/s00429-022-02496-9

Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An Evolutionary Analysis and Empirical Review. *Psychological Bulletin*, *136*(3), 351–374. https://doi.org/10.1037/a0018807

Goyal, M., Singh, S., Sibinga, E. M. S., Gould, N. F., Rowland-Seymour, A., Sharma, R., Berger, Z., Sleicher, D., Maron, D. D., Shihab, H. M., Ranasinghe, P. D., Linn, S., Saha, S., Bass, E. B., & Haythornthwaite, J. A. (2014). Meditation Programs for Psychological Stress and Well-being: A Systematic Review and Meta-analysis. *JAMA Internal Medicine*, *174*(3), 357–368. https://doi.org/10.1001/jamainternmed.2013.13018

Guendelman, S., Medeiros, S., & Rampes, H. (2017). Mindfulness and Emotion Regulation: Insights from Neurobiological, Psychological, and Clinical Studies. *Frontiers in Psychology*, *8*(MAR), 220. https://doi.org/10.3389/fpsyg.2017.00220

Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., & Lazar, S. W. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging*, *191*(1), 36–43. https://doi.org/10.1016/j.pscychresns.2010.08.006

Hooi, L. Y., Chen, P. L., Tan, K. W., de Vries, M., & Wong, H. K. (2025). Effects of mindfulness breathing meditation on stress and cognitive functions: a heart rate variability and eye-tracking study. *Scientific Reports*, *15*(1), 37185. https://doi.org/10.1038/s41598-025-23727-z

Kazdin, A. E. (2015a). Treatment as usual and routine care in research and clinical practice. *Clinical Psychology Review*, *42*, 168–178. https://doi.org/10.1016/j.cpr.2015.08.006

Kazdin, A. E. (2015b). Treatment as usual and routine care in research and clinical practice. *Clinical Psychology Review*, *42*, 168–178. https://doi.org/10.1016/j.cpr.2015.08.006

Keng, S. L., Smoski, M. J., & Robins, C. J. (2011a). Effects of Mindfulness on Psychological Health: A Review of Empirical Studies. *Clinical Psychology Review*, *31*(6), 1041. https://doi.org/10.1016/j.cpr.2011.04.006

Keng, S. L., Smoski, M. J., & Robins, C. J. (2011b). Effects of Mindfulness on Psychological Health: A Review of Empirical Studies. *Clinical Psychology Review*, *31*(6), 1041. https://doi.org/10.1016/j.cpr.2011.04.006

Kuzman, M. R., Giacco, D., Simmons, M., Wuyts, P., Bausch-Becker, N., Favre, G., & Nawka, A. (2012). Psychiatry training in Europe: views from the trenches. *Med Teach*, *34*(10), e708–e717. https://doi.org/10.3109/0142159X.2012.687481

Lazar, S. W., Kerr, C. E., Wasserman, R. H., Gray, J. R., Greve, D. N., Treadway, M. T., McGarvey, M., Quinn, B. T., Dusek, J. A., Benson, H., Rauch, S. L., Moore, C. I., & Fischl, B. (2005a). Meditation experience is associated with increased cortical thickness. *NeuroReport*, *16*(17), 1893–1897. https://doi.org/10.1097/01.wnr.0000186598.66243.19

Lazar, S. W., Kerr, C. E., Wasserman, R. H., Gray, J. R., Greve, D. N., Treadway, M. T., McGarvey, M., Quinn, B. T., Dusek, J. A., Benson, H., Rauch, S. L., Moore, C. I., & Fischl, B. (2005b). Meditation experience is associated with increased cortical thickness. *NeuroReport*, *16*(17), 1893–1897. https://doi.org/10.1097/01.wnr.0000186598.66243.19

Lieberman, J. M., McConnell, P. A., Estarellas, M., & Sacchet, M. D. (2025). Neurophysiological mechanisms of focused attention meditation: A scoping systematic review. *Imaging Neuroscience*, *3*. https://doi.org/10.1162/IMAG.a.14

Lim, D., Condon, P., & De Steno, D. (2015). Mindfulness and Compassion: An Examination of Mechanism and Scalability. *PLOS ONE*, *10*(2), e0118221. https://doi.org/10.1371/journal.pone.0118221

Lutz, A., Slagter, H. A., Dunne, J. D., & Davidson, R. J. (2008). Attention regulation and monitoring in meditation. *Trends in Cognitive Sciences*, *12*(4), 163–169. https://doi.org/10.1016/j.tics.2008.01.005

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, *56*(3), 227–238. https://doi.org/10.1037/0003-066X.56.3.227

Matiz, A., Fabbro, F., Paschetto, A., Cantone, D., Paolone, A. R., & Crescentini,

Mayer, S., van der Gaag, R. J., Dom, G., Wassermann, D., Gaebel, W., Falkai, P., & Schüle, C. (2014). European Psychiatric Association (EPA) Guidance on Post-graduate Psychiatric Training in Europe. *European Psychiatry*, *29*(2), 101–106. https://doi.org/10.1016/j.eurpsy.2014.01.002

Nabors, L. (2017). J. Mark Williams, Melanie Fennell, Thorsten Barnhofer, Rebecca Crane, and Sarah Silverton: Mindfulness-based cognitive therapy with people at risk of suicide (Reprint Edition). Guilford, New York, NY, 2017, 334 pp. *Mindfulness*, *8*(6), 1723–1724. https://doi.org/10.1007/s12671-017-0809-8

Nelson, E. E., Lau, J. Y. F., & Jarcho, J. M. (2014). Growing pains and pleasures: how emotional learning guides development. *Trends in Cognitive Sciences*, *18*(2), 99–108. https://doi.org/10.1016/j.tics.2013.11.003

Nicolaides, N. C., & Chrousos, G. P. (2025). Aanapanasati Meditation and Stress Reduction Among Health Science University Students. *The Open Public Health Journal*, *18*(1), 5–7. https://doi.org/10.1159/000528065

Phan, M. L., Renshaw, T. L., Caramanico, J., Greeson, J. M., MacKenzie, E., Atkinson-Diaz, Z., Doppelt, N., Tai, H., Mandell, D. S., & Nuske, H. J. (2022). Mindfulness-Based School Interventions: a Systematic Review of Outcome Evidence Quality by Study Design. *Mindfulness*, *13*(7), 1591–1613. https://doi.org/10.1007/s12671-022-01885-9

Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology. An introduction. *The American Psychologist*, *55*(1), 5–14. https://doi.org/10.1037/0003-066X.55.1.5

Singer, T., Seymour, B., O'Doherty, J., Kaube, H., Dolan, R. J., & Frith, C. D. (2004). Empathy for Pain Involves the Affective but not Sensory Components of Pain. *Science*, *303*(5661), 1157–1162. https://doi.org/10.1126/science.1093535

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008a). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine 2008 15:3*, *15*(3), 194–200. https://doi.org/10.1080/10705500802222972

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008b). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine 2008 15:3*, *15*(3), 194–200. https://doi.org/10.1080/10705500802222972

Stanley, E. A., & Jha, A. P. (2009). Mind Fitness - Improving Operational Effectiveness and Building Warrior Resilience. *Joint Force Quarterly*, *55*(1), 144–151. https://doi.org/10.1016/S0926-6410(02)00216-1

Tang, Y. Y., & Posner, M. I. (2013). Theory and method in mindfulness neuroscience. *Soc. Cogn. Affect. Neurosci.*, *8*(1), 118–120. https://doi.org/10.1093/scan/nss112

Tang, Y. Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience 2015 16:4*, *16*(4), 213–225. https://doi.org/10.1038/nrn3916

Tang, Y. Y., Ma, Y., Wang, J., Fan, Y., Feng, S., Lu, Q., Yu, Q., Sui, D., Rothbart, M. K., Fan, M., & Posner, M. I. (2007). Short-term meditation training improves attention and self-regulation. *Proceedings of the National Academy of Sciences of the United States of America*, *104*(43), 17152–17156. https://doi.org/10.1073/pnas.0707678104

Tugade, M. M., & Fredrickson, B. L. (2004a). Resilient Individuals Use Positive Emotions to Bounce Back from Negative Emotional Experiences. *Journal of Personality and Social Psychology*, *86*(2), 320–333. https://doi.org/10.1037/0022-3514.86.2.320

Tugade, M. M., & Fredrickson, B. L. (2004b). Resilient Individuals Use Positive Emotions to Bounce Back from Negative Emotional Experiences. *Journal of Personality and Social Psychology*, *86*(2), 320–333. https://doi.org/10.1037/0022-3514.86.2.320

Weng, H. Y., Fox, A. S., Shackman, A. J., Stodola, D. E., Caldwell, J. Z. K., Olson, M. C., Rogers, G. M., & Davidson, R. J. (2013). Compassion Training Alters Altruism and Neural Responses to Suffering. *Psychological Science*, *24*(7), 1171–1180. https://doi.org/10.1177/0956797612469537

Wu, R., Liu, L. L., Zhu, H., Su, W. J., Cao, Z. Y., Zhong, S. Y., Liu, X. H., & Jiang, C. L. (2019). Brief Mindfulness Meditation Improves Emotion Processing. *Frontiers in Neuroscience*, *13*, 482990. https://doi.org/10.3389/fnins.2019.01074

Zeidan, F., Johnson, S. K., Diamond, B. J., David, Z., & Goolkasian, P. (2010). Mindfulness meditation improves cognition: Evidence of brief mental training. *Consciousness and Cognition*, *19*(2), 597–605. https://doi.org/10.1016/j.concog.2010.03.014

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Kaur, S. & Jain, N. (2026). The Effect of Anapanasati Meditation on Resilience and Compassion among Regular Meditators. *International Journal of Indian Psychology*, *14*(2)*,* 758-775. DIP:18.01.072.20261402, DOI:10.25215/1402.072