

Anapana Meditation's Response-Buffering Role Among Office Workers: A Convergent Mixed-Methods Studies on Mindfulness and Wellbeing

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ABSTRACT

This research examines Anapanasati or Breath Awareness as a response buffer to unhealthy mental, emotional, physiological, and behavioral triggers. This convergent mixed-methods study utilized Charmaz's (2004) Constructivist-Grounded Theory (CGT), together with Baer's (2003) Kentucky Inventory of Mindfulness Scale (KIMS) and Lovibond and Lovibond's (1994) Depression, Anxiety, and Stress Scale (DASS-42). The inductive process of CGT revealed mindfulness transformation and wellbeing transformation as two major themes, with the emergence of breath awareness as a response buffer among the five office workers. The findings of this single-group experiment are supported by the rich narratives of the participants, and the simultaneous increase in KIMS and decrease in DASS-42 in their raw scores participants. While the sign-test did not yield significant results in Depression (DEP) and Anxiety (ANX) scales, the overall sign-test for KIMS and DASS-42 yielded significant results, along with the subscales of Describe (DES), Act with Awareness (AWA), and Accept without Judgment (AWJ) for KIMS, and Anxiety (ANX) subscale for DASS-42. Thus, this study positions Breath-Awareness Response (BAR) theory as a potential framework to augment mental health wellbeing not just in the workplace, but also in diverse populations, as viewed from the lens of stimulus-response theories, and supporting neurobiological and psychophysiological frameworks. This study uses Anapanasati, breath-awareness, and meditation interchangeably.

Keywords: Anapana, meditation, constructivist-grounded theory, KIMS, DASS-42, sign-test, stimulus-response,

INTRODUCTION

The rising cases of depression, anxiety, and stress affecting workforce wellbeing and productivity merit the investigation of Anapanasati meditation as an accessible approach to mitigate psychological distress (Karunanayake et al., 2022). As reported in *Facts and Statistics* by the Anxiety and Depression Association of America (n.d), significant percentage of the 40% of the U.S. population included in the workforce suffer from psychological disorders. Similarly, in the Philippines, employees quit work because of mental health concerns. There is also an alarming suicide rates (CDC, 2024; NAMI, 2024) because of a stigma towards professional mental health and inaccessibility of psychotherapeutic interventions (Martinez et al., 2020; NAMI).

This study aims to contribute to the growing body of research on the efficacy, effectiveness, and various

applications of meditation in buffering mental health disorders in various contexts (Choi et al., 2021; Daniel et al. 2022; Goilean et al., 2020; Helminem et al., 2022; Hu et al., 2024; Ibañez et al., 2022; Kriakous 2021; Krick et al., 2023; Lucas-Thompson, 2021; MacDougall et al., 2024; O'Donnell et al., 2023; Parmentier et al., 2019; Rich et al., 2022; Riley et al., 2022; Roca et al., 2023; Sivaramappa et al., 2019a; Sivaramappa et al., 2019b; Sofocleous, 2023; Valikhani et al., 2020; Wu et al, 2019). By answering the research question *how does the 25-day Anapanasati-bhavana impact the participants' daily life?* – this research positions Anapanasati, an ancient meditation technique on breath awareness the Buddha taught, as a potential mitigator or remedy to enhance mental and emotional wellbeing.

Anapanasati-bhavana. Anapanasati-bhavana means inhale (ana), exhale (pana), sati (focus or awareness), and cultivation (bhavana). Simply put, it means cultivation of breath awareness. This practice is divided into four stages that is interwoven with different stimulus response theories in this review. While triggers are the object of negative responses, Anapanasati uses the breath-body and the flesh-body as the objects to buffer automatic reactions. This the first stage of Anapanasati, the concept of *kaya*, which refers to the inseparability of the breath-body and the flesh-body. The mastery of breath, according to the Bodhisattvas, is key to bodily or physiological awareness, which empowers an individual to take control of the automatic reaction. The second stage teaches *vedana* or mastery of feelings. Once the meditator is able to anchor to breath-awareness presence and bodily sensations, it opens the pathways to where the sensation of the feelings are present in the body. This leads to the third stage *citta* where the mind is able to “catch the body-heart trigger” by allowing it to pass through without reaction, without judgment. And this leads to the fourth key, the *Dhamma*, the understanding of the ultimate truths: *aniccam* (impermanence), *dukkham* (inherent dissatisfaction of desires), *anatta* (things, not-self, or not-soul), *sunyata* (everything is void of ‘I’ and ‘mine’), and *tathata* (the acceptance of all these). Together, they are *Dhamma*, the ultimate truth in life (Bhikkhu, 1989). These concepts are interwoven in our following discussions to highlight their alignment with theoretical frameworks that support modern approaches to Mindfulness-Based Interventions (MBIs).

Time Orientation of Depression, Anxiety, and Stress. What makes breath-awareness an essential anchor for meditators is the ability of the breath to center the body, *vedana*, and *citta* to the present moment (Dahl & Davidson, 2019). For instance, while depression is linked with past regrets and rumination (Sofocleous), anxiety is linked to the perceived threat of the future (DSM-V-TR; Grupe & Nitschke, 2013). Stress, on the other hand, occurs when there is a perceived unmet need in the present or continuous present (Ahmady et al., 2021). This is where Anapanasati becomes crucial. By using the breath as an anchor to the present moment, the past, the present, and the future diminish, then comes the realization that nothing could go wrong in the *now* (Bhikkhu; Dass, 2010; Tolle, 2010).

In this light, this study shifts focus to how meditation alters responses since it is left unexplored by researchers (Baminiwatta & Solangaarachchi, 2021). The goal of meditation is not be good in meditation. Even if one sits for long hours meditating and chanting, if choices or responses made are the same before and after the practice, the same consequences will follow (Covey, 2022; Douglas & Heer, 2015). Thus, increased mindfulness, is not the focus of this study. Instead, it focuses on how Anapanasati technique empowers individuals to make different choices and responses when met with the same triggers.

Response Theories. In the intersection of stimulus-response theories and empirical neural correlates, psychophysiological, and polyvagal studies are the key concepts of Anapanasati that serve as a buffer to reactions that lead to negative emotional indicators. For instance, in Cognitive-Mediation Theory or CMT (Lazarus & Folkman, 2013) and Cognitive-Behavioral Theory or CBT (Beck, 2020), the reappraisal of a stimulus is a significant component of a healthy cognitive, emotional, and behavioral responses. This is the foundation of Anapanasati, to use the *ana* and *pana* to control the physiological sensations in the body (*kaya*) and acknowledge *vedana* as *aniccam* with *tathata*. Both Response-Ability (Covey) and Self-Determination Theory or SDT (Deci & Ryan, 1985) also support one's ability to choose, free from all influences, when

there is a recognition of the space between a trigger and a reaction. Freedom of choice, as Covey posited, aligns with the freedom from *vedana*, *citta*, and *dukkham* of Anapanasati. Thus, teaching an individual to be response-able, free from emotional, mental, and cognitive distortion. Lippelt and Hommel (2020) support these positive effects of meditation on cognitive and emotional responses, including in social relations. Valikhani et al. also aligns with the findings that mindful-buffer to stress yields beneficial effects in reducing depression and anxiety. Ganesan et al. (2023) also observed increased state of mindfulness up to two weeks of beginner meditations who engaged in Anapanasati technique.

In the research of Bharti et al. (2022) studying conspicuous consumption (CC or buying goods for status symbol), it was found among the 588 group of consumers who were split into two groups (meditators and nonmeditators), that meditation negatively correlates with CC in both groups. The role of meditation was also found to be associated with higher self-esteem which resulted in reduced CC. Responses of the meditation group also showed lower tendency to react to impulse buying and social pressures affecting CC, suggesting increased self-awareness and altered responses of the respondents.

Neural and Polyvagal Responses. Anapanasati-bhavana also aligns with empirical studies on neural correlates and the nervous system that provide evidence that meditation improves brain structure (Lippelt & Hommel; Melis et al., 2022; Mercadante et al., 2023). The benefits of this ancient technique are now acknowledged by empirical studies' findings that meditation engages the prefrontal cortex (PFC) associated with high-reasoning ability, including the regions associated with empathy, social connection and overall wellbeing – the anterior cingulate cortex (ACC), the insula (especially the anterior associated with emotion and self-awareness), tempoparietal junction (TPJ), and striatum (reward centers). These parts of the brain are essential in muscle control, including emotions, speech, seeing, and hearing. Other studies also found that meditation improves neural connectivity and thickens the grey matter of the brain (Melis et al.; Mercadante et al.), and further activates other neural substrates as observed using the ultra-high field 7 Tesla MRI (Ganesan et al.).

Seen through the lens of bio-behavioral framework, Anapanasati directly affects vagal responses because of its calming effects leading to a state of physiological calm and peace that supports emotional stability. This is further supported by a study investigating how respiration “phasically and tonically stimulates vagal nerves” (Gerritsen & Band, 2018) suggesting calmness and relaxation induced by Anapanasati practice.

Immune and Cardiovascular System. Studies have also found healthier biological markers among population groups who meditate versus those who do not (Jamil et al., 2023; Lenhart et al., 2020). Using MRI, it was observed that meditation strengthens the immune system and alleviates inflammation by preventing cytokine storm. Meditation also lowers blood pressure by lowering blood cholesterol levels while increasing high-density lipoprotein (HDL) levels (Jamil et al.; Lenhart et al.). Davidson & McEwen (2012) also found increased heart-rate variability (HRV) among meditators, allowing practitioners to consciously disengage from triggers. In a systematic search of Scopus articles (Amarasekera & Chang, 2019), the anti-inflammatory effects of Buddhist meditation to endothelial vasodilation and arterial stiffness, including lower blood-sugar levels, and blood-pressure were found among both young and elderly respondents who meditated. In another study (Beldar et al., 2022) of 100 participants with cardiovascular disorders, biomarkers examined through ECG, cardiac enzymes, and blood-sugar levels, suggested improved cardiovascular outcomes aside from the enhanced psychological health of the participants, which were found to have reduced depression, anxiety, and stress after practicing mini-Anapana at home for 30 days.

Anapanasati and Respiration. Breath-awareness bridges the gap among studies that have shown increase mindfulness as a result of meditation, without exploring its effect to stimuli responses. This gap moves this study to explore how Anapanasati or breath-awareness can bridge between trigger and reaction through observed cognitive, emotional, and behavioral responses extracted from the grounded participants'

narratives (See Table 1.). The simplicity of breath-awareness is supported by Ganesan et al. in their meta-analytic analysis of how focused-attention meditation (FAM) positively impacts brain activity using functional MRI (fMRI). In Anapanasati, as the term already implies, focused-attention is directed to the *right* object, and not just any object, but the breath-body and the flesh-body (Bhikkhu; Goenka). This is the foundation from which more advanced meditation practices originated. In the same study, they found how *sati* practices activates brain regions associated with default-mode, salience, and executive control networks. These strong findings made the government of Maharashtra in India adopt “Mind in Training for Right Awareness” program (Bansode & Pawar, 2024), in collaboration with Vipassana Research Institutes, suggesting the recognition of breath-awareness to promote wellbeing.

Aside from Anapanasati’s positive behavioral effects, the study of Karunarathne et al. (2023) also demonstrated how long-term meditators have slower resting respiratory rates and longer inspiratory breath-holding times compared to nonmeditators through the use of a spirometer. In this study, they found improved respiratory function’s positive correlation with Anapanasati. The study also supports the effectiveness of meditation in improving cardiovascular and immune system, since autonomic regulation of the nervous system also plays a significant role in immune and cardiovascular networks.

The encompassing effect of Anapanasati in holistic (cognitive, emotional, and behavioral) wellbeing and healthy responses was also supported by Liebmann et al., (2023). In their study of the effect of 3 different modules on 332 individuals assigned to one of the three modules or a control group, the modules: (1) presence, aligns with the core technique of Anapanasati affecting interoceptive awareness, (2) affect, aligns with *vedana*, which develops compassion, and (3) perspective, aligns with *citta* and *Dhamma*, which develop healthy cognitive appraisal and perspective taking.

Utilizing mixed-methods study, which involved gathering data from the participants, the research found significant reduction in depression, anxiety, and stress indicators. Through the data gathered, participants also reported increased mindfulness skills and improved mental and emotional stability.

Study Rationale. Despite the expansion of research in the field of meditation (Baminiwatta & Solangaarachchi), there is a lack of studies examining how Anapanasati technique, or other meditation practices, alter or buffer unhealthy response styles to triggers. This study aims to climb the three unexplored mountainous constructs: (1) how Anapanasati empowers personal agency to buffer unhealthy responses, (2) how breath-awareness serves as a space between trigger and reaction and (3) how Anapanasati interplays among stimulus-response theories, psychobiological correlates rooted in neurobiological and psychophysiological findings, and the rich experience of the participants.

To bridge this gap, this study leads with CGT to rigorously probe into the robust experiential perspectives of the participants. This method sets the groundwork for an extensive investigation of how Anapanasati influences trigger responses, a timely inquiry within the MBI colloquy. Quantitatively, this research examines how IV-AP impacts the first dependent variable of mindfulness through KIMS (DV1-KIMS), and the second variable of negative emotional indicators through DASS-42 (DV2-DAS). The raw scores were also treated using the nonparametric sign-test to support the thematic findings. This study’s unique design of combining thematic analysis, with two validated instruments, and statistical treatment builds to the emerging theory of Breath-Awareness Response (BAR), which establishes a strong foundation for future research on breath-focused meditation practices.

Table 1. Stimulus-Response Theories and Buffering Factors.

Framework	Stimuli	Buffering Factor	Response	Ānāpānasati Skill	Gap
Cognitive-			Emotional and	Observation of	How does one

Appraisal Theory (Lazarus & Folkman)	Event	Cognitive regulation	physiological response as a product of cognitive appraisal	thoughts, feelings, and emotions	appraise differently?
Cognitive-Behavioral Theory (CBT), Beck	Situation	Cognition and Emotion	Behavior as a product of cognition and emotion	Cognitive interpretation of a situation that dictates emotion that leads to behavioral response.	How does one alter cognition and emotional responses to alter behavior?
Response-Ability Theory, (Covey)	Stimuli	Freedom of Choice	Response is based on the four gifts: self-awareness, imagination, conscience, and independent will	Freedom to choose	How does one cultivate freedom of choice?
Self-Determination Theory (SDT), Ryan & Deci	Basic psychological needs	Skills and motivation	Behavior is driven towards holistic wellbeing	Nurturing of mind, skills, and motivation that dictates encompassing wellbeing.	How does one nurture the mind?
Neural Foundation of Emotional Regulation (Davidson et al.)	Trigger	Emotional regulation through mindful skills	Activation of certain brain regions.	Awareness of thoughts, feelings, and emotions	How does one become aware?
Polyvagal Theory (Porges)	Trigger	Physiological regulation through breathing	Regulates the vagal tone and HRV	Breath response	How does one learn breath response?
Proposed Framework					Bridging the Gap
Breath-Awareness Response (BAR) Theory, This Study	Trigger	Breath-awareness cultivation	Response is based on freedom from feelings (vedanā) and thoughts (citta) through breath-awareness	Breath-awareness as a response-buffer	<i>Through Breath Awareness Cultivation</i>

METHODOLOGY

This study utilized convergent mixed-methods design, blending qualitative and quantitative approaches to provide an even deeper analysis of Anapanasati’s effects than other experimental design would allow. For instance, in this exploratory study aiming to parse through the complex strata of different perspectives, being informed through simultaneous data collection and robust interpretation is well-suited than small sample design would allow, since it lacks accommodation of the depth of the qualitative insights necessary to describe the lived experiences of the participants. (Creswell & Plano-Clark, 2018).

This chosen study design is also deemed more appropriate for a study lacking a control group (Bockelman et al., 2013) for the initial stages of investigating an emerging theory, allowing more rigor in analysis of changes overtime within a small sample size (Braun & Clarke, 2003) from which subsequent controlled trials can be conducted.

Mask or Blind Study. To minimize bias and prevent participants from adjusting their behaviors or characteristics during the conduct of study, blind approach strengthens the experimental validity of this study (Wood et al., 2008).

Sampling. While the study acknowledges the limitations of a small sample size, the deliberate choice of a small sample size ($n=5$; 4 females and one male; one female was diagnosed with GAD, and another female was diagnosed with MDD), was justified by the focus of the study on capturing the detailed qualitative insights of the office workers practicing Anapana meditation. This is essential in informing the transformations that quantitative methods alone, because of its strata, will not be able to capture. Thus, the richness of the data through the single-point theoretical design, allows for a deeper understanding of the transformation processes of the individuals, which is a pillar of qualitative research (Charmaz & Thornberg, 2020). During the post-practice interview, the researcher gathered as much data as allowed, and the transcribed interviews were the main data source (Charmaz & Thornberg; Foley et al., 2021). The participants were volunteer office workers who were at least 18 years of age and nonexperienced meditators.

Data Gathering. Upon volunteering, the participants were then administered an Informed Consent Form, followed by KIMS and DASS-42. The meditation guide was recorded on the same day and was used all throughout the 25-day program. The Anapana meditation practice was unsupervised, and the Telegram poll was used to monitor their participation. Aside from the two personal visits, the researcher checks on the progress of the participants once via Telegram. On the 25th day, KIMS and DASS-42 were readministered followed by the interview. The Zoom recordings were transcribed and thematic analysis using CGT was applied.

Constructivist-Grounded Theory. CGT is a flexible and an iterative methodology of research in the field of social sciences and psychology, that allows a researcher to co-construct theoretical knowledge with the participants (Charmaz & Thornberg). This standpoint guards the emerging theory to root in the grounded data coming from the participants and the interpretive lens of the researcher, providing a persuasive rationale for its use in this research (Bansal & Corley, 2012). In adherence to CGT, the researcher observed the following process: (1) data immersion, coding process, which involves initial coding and focused coding, (2) participants' corroboration of themes, (3) refinement of data based on participants' feedback, (4) memo-writing, (5) theme subcategorization, (6) theme categorization, (7) external audit from subject-matter experts, (8) constant iteration, comparing, and contrasting, and (9) allowance of the theme to emerge. Figure 1 illustrates CGT's inductive process.

Sign-test on KIMS and DASS-42. KIMS and DASS-42 are self-report measure scales that have been found to show good internal consistency and test-retest reliability and a clear factor structure (Makara-Studzińska et al., 2022; Medvedev, 2016). KIMS demonstrates Cronbach's alpha consistency between $r=.76$ and $r=.91$ for its subscales (Baer et al. 2022). The item categorization and total possible score for each subscale are presented in Table 2. Sign-test was calculated by pairing raw data via sign-test online calculator (Sign-test Online Calculator, n.d.).

DASS-42, on the other hand, demonstrates Cronbach's alpha consistency ranging from $r=.71$ to $r=.93$. Table 3 shows DASS-42 item assignment, together with the maximum possible score for each construct. Note that DASS has no direct implications for allocating patients to discrete diagnostic categories such as the DSM and ICD and is not intended for clinical diagnoses of mental health or mental health disorders (Lovibond & Lovibond).

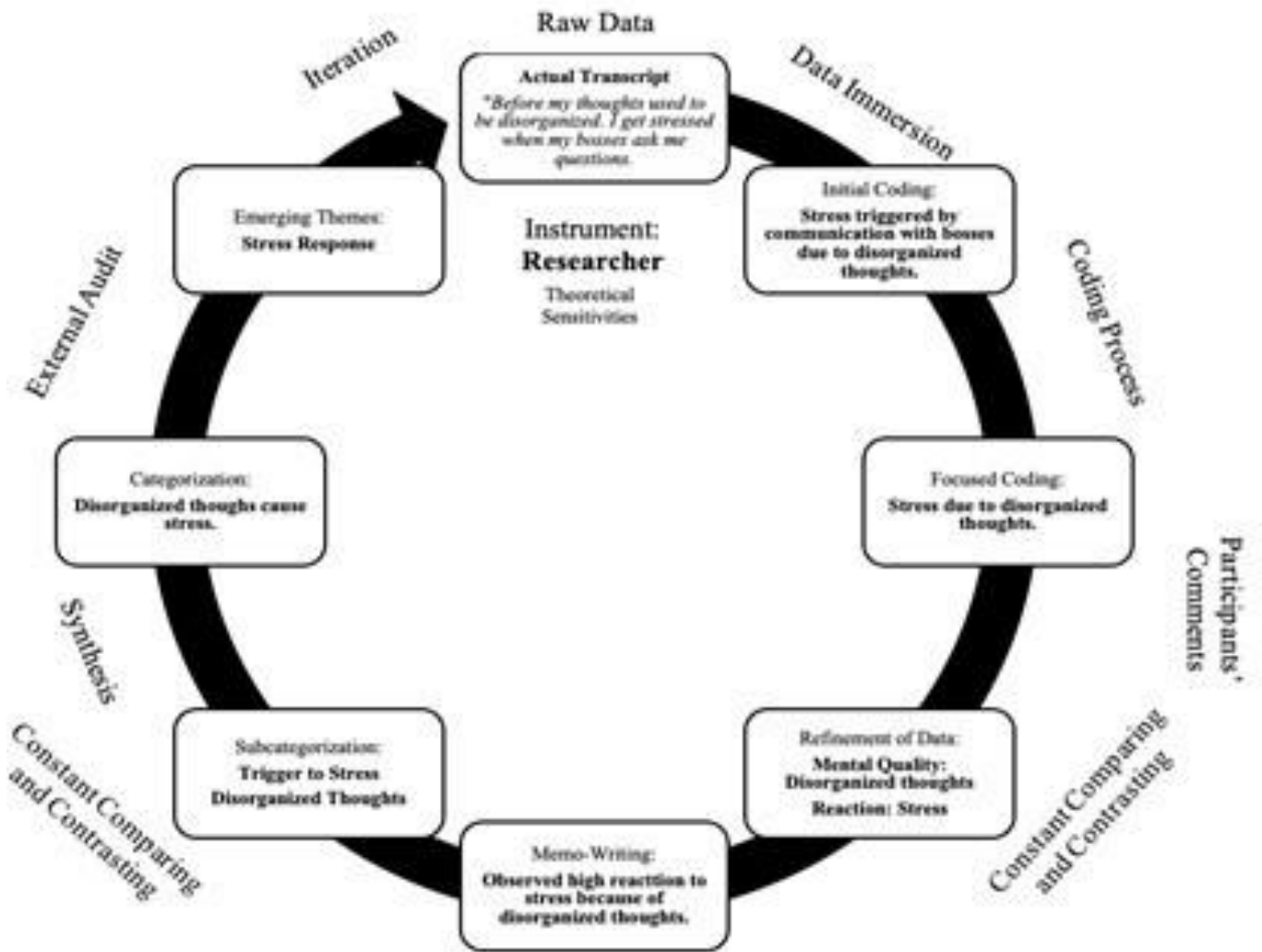


Figure 1. CGT Inductive Process.

Table 2. KIMS Subscales Total Items.

Sub-Scales	Categorized Items	Total	Score
Scale 2 – Describing (DES)	2, 6, 10, 14, 18, 22 , 26, 34	8	40
Scale 3 – Act with awareness (AWA)	3, 7, 11 , 15, 19, 23, 27, 31, 35 , 38	10	50
Scale 4 – Accept without judgment (AWJ)	4, 8, 12, 16, 20, 24, 28, 32, 36	9	45

Note: Observe subscale is omitted as KIMS author Ruth Baer suggested because of its inconsistencies (Baer et al.). KIMS is scored using the Likert Scale with corresponding scores (1=Never or very rarely true; 2=Rarely true; 3=Sometimes true; 4=Often true; 5=Very often or always true). Item numbers in bold are reverse scored.

Table 3. DASS-42 Subscales and Total Items.

Subscales	Items	Total Items	Total Score
Depression (DEP)	3, 5, 10, 13, 16, 17, 21, 24, 26, 31, 34, 37, 38, 42	14	42

Anxiety (ANX)	2, 4, 7, 9, 15, 19, 20, 23, 25, 28, 30, 36, 40, 41	14	42
Stress (ST)	1, 6, 8, 11, 12, 14, 18, 22, 27, 29, 32, 33, 35, 39	14	42

Note: DASS-42 assigns a point for the 42 questions on a 4-point Likert scale (0=Never; 1=Sometimes; 2=Often; 3=Almost always).

Table 4 shows the DASS-42 score brackets corresponding with each of the subscales' severity description. Figure 2 below illustrates the statistical treatment across all quantitative data through the nonparametric sign-test.

Table 4. DASS-42 Score Bracket and Severity Descriptions (SD).

SD	DEP	ANX	ST
Normal (No)	0-9	0-7	0-14
Mild (Mi)	10-13	8-9	15-18
Moderate (Mo)	14-20	10-14	19-25
Severe (Se)	21-27	15-19	26-33
Extremely Severe (ES)	28+	20+	34+
Over	42	42	42

Note: Codes beside each SD are supplied for ease of data presentation.

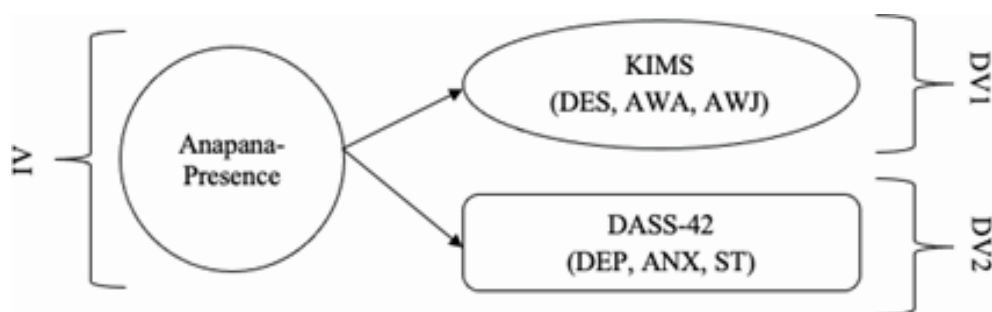


Figure 2. Sign-test: IV-AP on DV1-KIMS and DV2-DAS.

Legend: KIMS: DES-Describing, AWA-Acting with Awareness, and WJ-Accepting without Judgment; DASS-42: DEP-Depression; ANX-Anxiety, and ST-Stress

Ethical Considerations. The blind study was approved by the owner of the company who was concurrently the VP for Human Resources following internal company protocols complying with legal procedures and requirements. Informed Consent Forms were also signed in the presence of an HR representative indicating they can withdraw anytime without explanation. The Form also stated that they would be informed of the nature of the research once the findings have been concluded. The Debrief protocol strictly follows the mental health policies and guidelines of the company in compliance with pertinent labor, mental health, and wellbeing laws in the Philippines. The Debrief underwent two layers: (1) with the key HR personnel (who did not participate in the study) to identify if further intervention or endorsement to a specialist is warranted, and (2) individual debrief of the participants according to the concluded findings, in the presence of a key HR personnel. Before the interview, the HR reviewed the questions and allowed the researcher to conduct

the post-interview without a representative from the department to allow the participants to open up more. Dr. Ruth Baer gave express permission via email for the use of KIMS. DASS does not require permission for studies (DASS FAQ, n.d.).

Methodological Limitations. While this study acknowledges the limitation of the generalizability of the findings due to lack of a control group, it also acknowledges that this practice is inherent to a convergent mixed-methods design and single-group experimental design. The researcher acknowledges the limitation posed by the small sample size, which reflects the exploratory stage of the study, without however, affecting its sufficiency to provide preliminary insights and generate hypotheses, particularly in the qualitative data extracted (depth over breadth). The study’s methodological rigor by data triangulation and CGT analysis, provides a strong foundation for its reliability and validity despite the sample size limitation (Morse, 2010).

RESULTS

This part first presents, the qualitative data and second, the quantitative and sign-test results, and third the triangulated results of the data. The qualitative part adheres to the inductive process to walk readers through the highly methodological process of CGT thematic extraction (Charmaz & Thornberg). The Filipino parts of the transcripts were directly translated to English to cater to an even wider audience of the paper (Temple & Young, 2004) while maintaining the context (Squires, 2014) of the participants’ narratives. For brevity, the actual transcripts were *italicized*, instead of being enclosed in quotation marks. The *first personal pronouns* were also italicized and enclosed in parentheses for ease of reading (e.g. *(he)*, *(she)*, *(him)*, *(her)*).

Table 5 below shows the demographic profiles of the participants and the frequency (*f*) of their participation

Table 5. Participants’ Demographics.

Participants	Age	Sex	Work	Diagnosis	<i>f</i> / 25 days
A	21	M	Purchasing Assistant	None	21
B	27	F	Accounting Officer	None	13
C	25	F	Executive Assistant	None	20
D	27	F	HR Manager	MDD	21
E	21	F	HR Officer	GAD	25

Note: MDD=Major Depressive Disorder; GAD=Generalized Anxiety Disorder

Qualitative Findings

From the broad question – *how did the 25-day Anapanasati-bhavana impact the participants’ daily life*, we derive the following themes on improved cognitive appraisal, behavioral choices, and acceptance, as a result of increased self-awareness, which builds to mindfulness and wellbeing transformation.

Mindfulness Transformation. (1) **Cognitive enhancement** – aligned with describing ability, participants’ narratives illustrate their improved skills in labeling their thoughts, feelings, and emotions, including their behavior. For instance, Participant B narrated how her mind was *more collected* and able to *assess things better*, and *reduce overthinking*. She also narrated how it improved her focus and helped her with *faster decision-making*, and *differentiating (her) emotions*. Participants B and C shared the experience of learning *how to reflect*. Participant D narrated how meditation *gave (her) clarity*, and *ability to center her thoughts... and think things through... and helped (her) explain better and teach her staff*. Participant E narrated show she *became more aware of (her) thoughts* and developed *precision* in observing her *interaction and conversations with other people*, while before she *didn’t notice a lot of things*. Under this theme, the

narratives revealed improvement in the participants' ability to organize their thoughts, focus, describe their emotions, and gain clarity; (2) **Behavioral choices** – aligned with acting with awareness ability, the participants' narratives support conscious behavioral effort to choose a different response to their previous triggers. For instance, there was an observed decision to use meditation to their benefits, indicating intention to effect changes in their behavior. Participant A who admitted he *felt compelled to participate* because *he was already in it* took advantage of the practice and discovered it could help him *fall asleep*. Although he said he *did it for the research*, his narration underscores his personal agency to take advantage of the benefits of meditation. Participant B narrated how she *divert(ed) her thoughts* from negative social media influence. She also said that meditation helped her refrain from *using (her) phone first thing in the morning upon waking up*. Participant also shared how she *started (her) day reflecting on her thoughts and tasks for the day*, and was *able to develop (her) own processes*. Similarly, Participant C also shared how she became *more productive at work* and that she *(did not) hurry like (she) used to*. Participant D also developed her own style by *associating breath with light*. She also acknowledged how she had *more space before the reaction time and control (her) emotions*. At work, meditation also *help(ed) (her) explain or teach (her) staff*. Anapanasati also made her develop the *goal to be present*. Participant E also found Anapanasati as something she *can do anytime (she) want(ed)*. The practice also helped her *rationalize her actions*, and she had the intention to be *100% focused on meditation*. In her narration, Participant E also observed that she stopped *comparing (herself) to others*. This further strengthens cognitive enhancement where cognitive flexibility was also extracted from their narratives, which also supports the next theme. Overlapping discovery for Participants A, B, and C is how meditation helps them *fall asleep*: (3) **Nonreactive Choice** – aligned with accepting without judgment, the participants' narratives provide evidence that more than just an after effect, they gained the ability to consciously choose not to react to what used to be their triggers. Participant A, whom we discussed to have admitted that he just went on with the practice, found utility in the practice by listening to it *while laying down to put (him) to sleep*. Participant B narrated that *if (she) want(ed) to be sad, (she) allowed (herself) to be sad. If she want(ed) to feel happy, (she) allowed (herself) to be happy*. She also said that she was *more at peace*. Participant C observed in herself that she was *less overwhelmed*. She was also *more comfortable with decisions that didn't sit well with (her)*. She also just *create (her) own timeline*, instead of getting stressed *with other people's timelines to avoid stress*. She said that the practice made her *more patient*. Participant D also observed in herself that could let the distractions go, *then... get back to what (she's) doing*. She was also less reactive of her boyfriend's *road rage and driving style*. She said that sometimes, when she meditates, it was like *(her) boyfriend is meditating with (her)*. Like Participant C, she learned that if she *wasn't able to finish work, there's still tomorrow*. Participant E narrated that she was *more acknowledging of (her) thoughts and feelings* and having them was *okay*. Despite her same level of sadness, she said she was *more at peace with it*. She also shared how she became more accepting that our *paths vary*.

Insights revealed observed general increase in the mindfulness skills as applied by the participants in their daily lives. The narratives also illustrate the convergence and divergence of the participants' experiences. Although Participant A claimed he did not observe any changes in his mindfulness skills as he had always *tried to be composed* and that was *just (his) style*, narrated how he was able to use Anapanasati to his advantage. The thematic extraction for Mindfulness is shown in Figure 3.

Below we present the impact of Anapanasati to wellbeing as the participants provided rich narratives of the decrease in their negative emotions and describe changes in their daily reactions to triggers.

Wellbeing Transformation. (1) **Emotional Awareness** – aligned with increased cognitive ability is interoception or self-awareness, the participants' heightened self-awareness is demonstrated by their stories of change that mitigated symptoms of depression. For instance. Participant B said that she was *more in touch* with her feelings and can now *differentiate between hate and just being upset*. She also narrated how her *crying outbursts (were) not as frequent as they used to*. Participant C described feeling *much lighter and refreshed in the morning*

and that she has learned *to be calm*. Participant D, who was taking anti-depressants, narrated how meditation helped her *feel emotions better* as her *meds tend to numb* her. Participant E shared an experience with Participant C with being *happier and more refreshed in the morning*. She was also more cognizant of her feelings. Participant E also started to acknowledge that *her depressive symptoms were really a problem*. These narratives complement the theme of cognitive enhancement necessary to put a break on rumination; (2) **Calm and Relaxation** –the stabilization of the mind through calmness and relaxation is significant to address various anxiety symptoms. The unstoppable trail of what if’s of the future further manifests as physiological symptoms. The narratives of the participants demonstrated how Anapanasati has helped calm and relaxed them. For instance, Participant A, although started with feeling *compelled*, described the practice to *relax (him) just like how watching videos and playing video games do*. As Participant B had previously narrated, Anapanasati also *gave (her) peace*. She also described her anxiety to have dropped from 4 to 3 on a scale of 5. Participant C also has an interesting experience. She *used to have nightmares* but during the duration of the practice, she wasn’t *get(ting) nightmares anymore* that caused her *to catch (her) breath*. Participant D narrated how Anapanasati helped her *rationalize that there was nothing to worry about*. Just like Participant C, Participant D acknowledged how *meditation became (her) calmness*.



Figure 3. Mindfulness Transformation Themes Extraction Process.

Note: C=cognitive; E=emotional; P=physiological/ physical; B=behavior; S=social

Participant E, who was diagnosed with GAD, shared how Anapanasati made her *anxiety attacks less intense*, including its physiological manifestations. She claimed her anxiety-induced *headache, stutters and tremors were less* and she was *much calmer compared before*. Complementing the theme of behavioral choice, Participants A, B, C, D, and E, also narrated *better sleep*; (3) **Stress Regulation** – the last theme involves healthy stress coping mechanisms. Participant A acknowledged how meditation *slightly helped with (his) stress* and self-reported that it dropped by from 3 to 2. For Participant B, aside from reduced overthinking, she also *enter(ed) the workplace with a sense of peace*. She said she was also better able to answer *when (her) bosses ask (her) questions*. Aligned with behavioral choice, she also *used to hesitate to speak to other staff when they had concerns because (she) didn’t know what to say*. Since she started Anapanasati, her thoughts were *more collected and organized* making it *easier* for her to answer queries from workmates. Similar to Participant B, Participant C also observed that she was *more productive at work* and *she could do more*, which *lessened (her) stress*, as she also acknowledged that *there’s still tomorrow* and there was no need *to hurry like (she) used to*. She was also less prone to *get easily annoyed with (her) workmates*. Participant D also narrated how she could *plan ahead of time*. She compared Anapanasati with slate (the toy that erases its writings when the knob is turned). Participant E also narrated that she was *more excited to*

Although she had a *challenging time being consistent*, like Participant C, she also *set aside time for it because (she) knew it was good for (her)*, further admitting that *(her) mind used to be chaotic* and meditation allowed her to see that *if there was chaos around (her), (she) could really center herself*. Participant E also had a *hard time to stay focused because of (her) trail of thoughts*. However, after the practice, she was *more acknowledging of (her) thoughts, and it was okay to have them*. She also noticed improved precision in her *ability to describe (her) interactions with people, that it was like streaming a scene in (her) mind*, since she used to have a *hard time describing them*. These narratives illustrate how one construct of Baer's mindfulness scale overlaps with one another when applied in daily life. These findings further show the interrelatedness of trigger and response domains aligning with the discussed theoretical frameworks earlier. Although it was not a requirement for them to meditate, they chose out of their own autonomy to keep practicing, indicating the application of acting with awareness, and accepting without judgment because of their perceived benefits. With some sharing experiences on being able to *catch their thoughts, feelings, or having the precision of describing their experiences like streaming a scene*, there was also an observed increase in their ability to label or discuss their mental and emotional state.

Choices of Wellbeing. Participants A, B, and C observed that they sleep better when they use the meditation guide at night, describing the healthy physiological response that led them to behavioral responses to *use meditation to fall asleep at night or while on commute*. Participant B used to *avoid comfortable emotions*, but it changed by allowing herself to *feel what (she) likes to feel, unlike before*. She was also stressed when *asked questions by (her) bosses*, but it also changed because after the practice she observed how she was *also more aware of things when asked by them*. She also *developed (her) own processes* and she goes to *the workplace with a sense of peace and reduced overthinking* or what-if rumination because she was *able to manage (her) tasks better*. Another noteworthy change was her active *replacement of (her) morning habit with meditation*, instead of *picking her phone up first thing in the morning*. This alteration in her routine also allowed her to *reflect on the tasks (she) needed to do for the day*. Participant C also felt *overwhelmed and would meditate when (she) needed headspace*. She also stopped getting *nightmares*. At work she also *developed her own timeline*, instead of *following other people's timeline*, so she *didn't get stressed a lot*. It also *made her patient* and more open to her workmates, and considered that sometimes *(she) might be the one at fault*. Just like Participant B, *(she) became more productive at work, and (she) got to do more*, further attributing it to the practice because *with meditation, she could really do a lot of things*. These responses were different from how she used to because she used to panic *when there were events*. She admitted that sometimes she thought like *there was nothing left to do* and would *get annoyed with her workmates*, and that she had the tendency to *leave things hanging* when pressured. Participant D also used to be triggered by her *boyfriend when he drives (her) to work in the morning because he easily gets enraged on the road*. She noticed that on the duration of Anapanasati, she *had more space before (her) reaction time*. She also narrated that *(she) looked forward to meditating in the evening, so (she) could process her emotions* as her psych meds tend to *numb (her)*. She also narrated how meditation *greatly helped with (her) anxiety* and made her *worry less* because it had given her *time to plan*. Participant E also noticed how *(her) anxiety attacks were less intense* and anxiety-induced physiological manifestations like *stutters and tremors were less*. She was also *more acknowledging of her sadness and became more at peace with it and more excited to meet people and go to work*. Just like Participant B, *(she) realized (she) should allow herself to feel what (she) wanted to feel*. Similar to the experiences of Participants C and D, she also *realized that (she) couldn't control everything*. She also realized that she had a choice to *relax or let go of (her) thoughts or just give (herself) an extra burden*.

Overlapping Effect on Mindfulness and Wellbeing. All these narratives point to overall transformation of the participants in the overlapping constructs of mindfulness and depression, anxiety, and stress. The themes of cognitive enhancement, behavioral choices, and nonreactive choice, along with the themes of emotional awareness, calm and relaxation, and stress regulation, align with the third emerging theme of Anapanasati as a response-buffer. While there were theoretical constructs on both areas of mindfulness and DAS, it is

interesting to note these overlaps, acknowledging the complexity of human behavior in relations to their triggers and reaction. Figure 5 below shows the emergent of the third major theme.

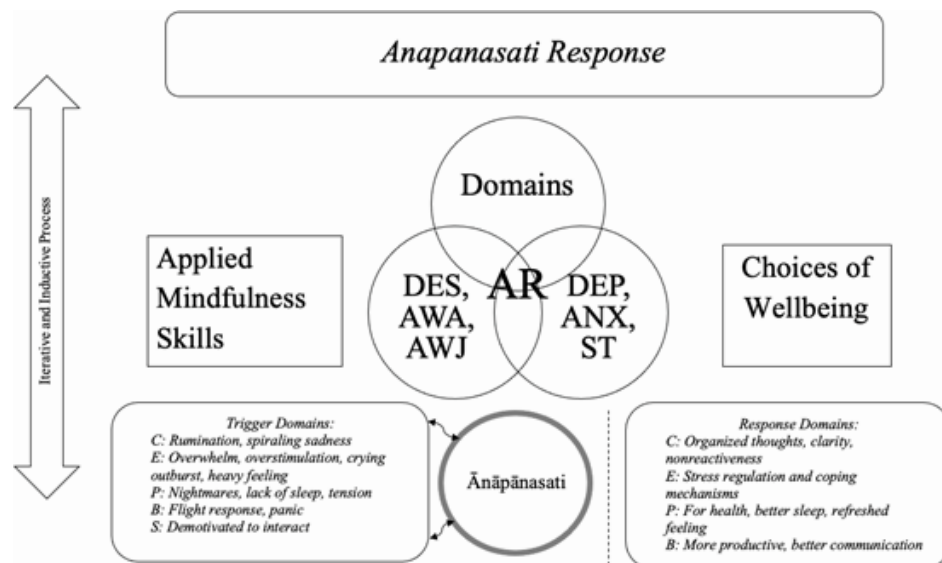


Figure 5. Anapanasati Response Themes Extraction Process.

The summary of qualitative themes is shown on Table 2.

From these qualitative findings, this section leads us to the supporting quantitative findings via Sign-test.

Table 2. Summary of Qualitative Themes

Mindfulness Transformation	Wellbeing Transformation	Buffering Effect of Anapanasati
Cognitive Enhancement	Emotional Awareness	Applied Mindfulness Skills
Behavioral Choice	Calm and Relaxation	Choice of Wellbeing
Nonreactive Choice	Stress Regulation	Overlapping Effect

Sign-Test on IV-AP, DV1-KIMS, and DV2-DAS

IV-AP on DV1-KIMS. Table 6 below shows a consistent increase in KIMS overall score and DES subscales. Participant C's score in AWA subscale did not change, while Participant B's score did not change in DES subscale. However, the sign-test is significant across all variables.

Table 6. IV-AP on DV1-KIMS.

	KIMS			DES			AWA			AWJ		
	Pre	Post	D	Pre	Post	D	Pre	Post	D	Pre	Post	D
A												
B												
C	88	93	5	25	26	1	34	35	1	29	32	3
D												
E												

77	80	3	19	20	1	30	32	2	28	28	0
73	83	10	18	19	1	32	32	0	23	32	9
95	115	20	30	40	10	32	43	9	33	34	1
60	84	24	17	20	3	31	37	6	12	27	15
$p=.01267$			$p=.01267$			$p=.01267$			$p=.01267$		
Significant			Significant			Significant			Significant		

Legend: D=Difference

IV-AP on DV2-DAS. Table 4 below shows consistent decrease in the overall DASS-42 scores and its respective subscales. Participant B’s Depression indicators decreased from Moderate to Normal (by two brackets), Anxiety from Severe to Normal (by three brackets), and Stress from Mild to Normal (by one bracket). Participant E decreased in Stress indicator from Severe to Moderate (by one bracket). Statistical results for the overall DASS score and its subscale ANX are significant, but are nonsignificant for DEP and ST.

Table 7. IV-AP on DASS-42 and SDs.

	DASS-42			DEP			ANX			ST		
	Pre	Post	D	Pre	Post	D	Pre	Post	D	Pre	Post	D
A	19	18	-1	7 (No)	8 (No)	-1	7 (No)	6 (No)	-1	4 (No)	5 (No)	-1
B	47	22	-25	19 (Mo)	9 (No)	-10	15 (Se)	7 (No)	-8	13 (Mi)	6 (No)	-7
C	38	29	-9	19 (Mo)	15 (Mo)	-4	14 (Mo)	10 (Mo)	-4	5 (No)	4 (No)	-1
D	10	2	-8	5 (No)	0 (No)	-5	3 (No)	1 (No)	-2	3 (No)	1 (No)	-2
E	91	68	-23	32 (ES)	27 (ES)	-5	31 (ES)	20 (ES)	-11	28 (Se)	21 (Mo)	-7
$p=.01267$			$p=.08986$			$p=.01267$			$p=.08986$			
Significant			Not Significant			Significant			Not Significant			

Summary of Quantitative Findings. Table 8 shows the sign-test of the raw scores for the following variables: KIMS-significant; DES-significant; AWA-significant, and AWJ-significant. For DASS-42 and its subscales, DAS is significant, DEP is not significant, ANX is significant, and ST is not significant. The the summary of statistical treatment across for both KIMS and DASS-42 and their respective subscales are shown below.

Table 8. Summary of Quantitative Findings.

IV-AMP on DV1:	KIMS	DES	AWA	AWJ
	(.01267)	(.01267)	(.02275)	(.02275)
	Significant	Significant	Significant	Significant
IV-AMP on DV2:	DASS-42	DEP	ANX	ST
	(.01267)	(.08986)	(.01267)	(.08986)
	Significant	Not Significant	Significant	Not Significant

Cross-Analysis of the Participants

Mindfulness transformation and wellbeing transformation are presented in Tables 9 and 10, respectively, aligning the themes to each construct of the instruments used, KIMS and DASS-42.

Finally, Table 11 shows the cross-participant analysis with respect to Anapanasati’s potential buffering effect on responses as a result of increased skills in self-awareness, with an acknowledgment of the limitation of its external validity and generalizability given the sample size.

Table 9. Summary of Cross-Analysis for Mindfulness.

Themes	N (5) of Participants Contributing	N of Excerpts Assigned	Overlapping Quotes	p<.05
Cognitive Enhancement <u>Focused Codes:</u> Organized thoughts More clarity Ability to describe Feeling recognition Self-reflection	5	24	<i>My mind is more collected</i> <i>I'm more able to reflect on my tasks for the day.</i> <i>I can assess things better now.</i> <i>It gave me clarity</i> <i>It helped me better explain and teach my staff.</i> <i>I see precision of my interaction and conversations.</i> <i>I'm able to recognize my feelings.</i>	DES is significant at p=.01267
Behavioral Choice <u>Focused Codes:</u> Cognitive regulation Emotional regulation Behavioral awareness Behavioral adjustments	5	33	<i>I use it to make me fall asleep.</i> <i>I used it to replace my morning habit.</i> <i>I have developed my own processes.</i> <i>I became more productive at work.</i> <i>I don't hurry like I used to.</i> <i>I don't compare myself to others anymore.</i>	AWA is significant at p=.01267

Nonreactive Choice			<i>I allow myself to feel.</i>	
<u>Focused Codes:</u>			<i>I acknowledge my thoughts and it's okay.</i>	
Cognitive allowance			<i>I'm more comfortable with others' decisions.</i>	
Emotional allowance	5	18	<i>I don't get easily annoyed.</i>	AWJ is significant at $p=.01267$
Nonreaction to triggers			<i>I'm still sad, but I'm more at peace with it.</i>	
Improved physiological state			<i>I'm calmer.</i>	
			KIMS significant at $p=.01267$	

Triangulation of Results. Table 12 below shows the triangulated findings. The integration compares the emergent qualitative themes with the KIMS and DASS-42 scores and their subscales. Although DEP and ST yielded not significant sign-test result at $p=.08986$, the rest of the variables yielded significant results.

Timing and Point of Integration. The phases of the research were carefully planned to gather baseline or initial data from the participants pre-intervention, from which qualitative insights can be compared. Following the quantitative survey, in-depth qualitative interviews were conducted to explore themes in changes in the depression, anxiety, and stress indicators of the participants and their coping mechanisms. Integration of the findings occurred in the analysis phase, where qualitative outcomes were mapped against the quantitative results, producing a robust and multi-dimensional understanding of the impact of Anapanasati meditation as a potent mediating factor in daily stressors (Teddlie & Tashakkori, 2009).

Table 10. Summary of Cross-Analysis for Wellbeing.

Themes	N Contributing	N Quotes	Overlapping Quotes	p<.05
Emotional Awareness			<i>I now start my day reflecting on my emotions.</i>	
<u>Focused codes:</u>			<i>I feel what I like to feel, unlike before.</i>	
Cognitive regulation			<i>I can now differentiate emotions.</i>	
Emotional allowance	4	22	<i>My crying outbursts are not as frequent.</i>	DEP is not significant at $p=.08986$.
Acceptance and peace			<i>I meditate to lessen the overwhelm.</i>	
Improved physiological state			<i>I understand myself better.</i>	
			<i>I'm able to recognize my feelings.</i>	

<p>Calm and Relaxation</p> <p><u>Focused codes:</u></p> <p>Calm and relaxation</p> <p>Relaxed physiological state</p> <p>Cognitive regulation</p> <p>Healthy behavioral response</p>	<p>5</p>	<p>17</p>	<p><i>It relaxes me like when I watch videos.</i></p> <p><i>It gave me peace.</i></p> <p><i>It makes me fall asleep.</i></p> <p><i>I don't get nightmares anymore.</i></p> <p><i>I feel lighter and refreshed in the morning.</i></p> <p><i>Meditation is really my calmness.</i></p> <p><i>It greatly helped with my anxiety.</i></p> <p><i>I'm much calmer, compared to before.</i></p> <p><i>My anxiety attacks are less.</i></p> <p><i>My stutters and tremors are less.</i></p> <p><i>I don't worry as much.</i></p>	<p>ANX is significant at $p=.01267$</p>
<p>Stress Regulation</p> <p><u>Focused codes:</u></p> <p>Enhanced cognition</p> <p>Enhanced mood</p> <p>Mental and emotional allowance</p> <p>Improved physiological state</p> <p>Healthy behavioral response</p>	<p>5</p>	<p>26</p>	<p><i>I enter the workplace with a sense of peace and organization.</i></p> <p><i>I now answer queries from workmates better.</i></p> <p><i>I became more productive at work.</i></p> <p><i>It lessened my stress.</i></p> <p><i>I don't get easily annoyed with workmates.</i></p> <p><i>I can plan ahead of time.</i></p> <p><i>I'm more excited to meet people.</i></p> <p><i>I'm more excited to go to work.</i></p>	<p>ST is not significant at $p=.08986$</p>
			<p>DASS-42 is significant at $p=.01267$</p>	

Table 11. Cross-Participant Analysis on Anapanasati’s Response-Buffer Effect.

	KIMS			DEP			ANX			ST			Buffering Effect
	Pre	Post	D	Pre	Post	D	Pre	Post	D	Pre	Post	D	
A	88	93	5	7 (No)	8 (No)	-1	7 (No)	6 (No)	-1	4 (No)	5 (No)	-1	Potential
B	77	80	3	19 (Mo)	9 (No)	-10	15 (Se)	7 (No)	-8	13 (Mi)	6 (No)	-7	Potential
C	73	83	10	19 (Mo)	15 (Mo)	-4	14 (Mo)	10 (Mo)	-4	5 (No)	4 (No)	-1	Potential
D	95	115	20	5 (No)	0 (No)	-5	3 (No)	1 (No)	-2	3 (No)	1 (No)	-2	Potential
E	60	84	24	32 (ES)	27 (ES)	-5	31 (ES)	20 (ES)	-11	28 (Se)	21 (Mo)	-7	Potential
	<i>p</i> =.01267			<i>p</i> =.08986			<i>p</i> =.01267			<i>p</i> =.08986			
	Significant			Not Significant			Significant			Not Significant			

Table 12. Triangulated Findings.

Themes	Measures	Scores	<i>p</i> <.05	Sign-test
Mindfulness Transformation	KIMS	Increased	.01267	Significant
Cognitive Enhancement	DES	Increased	.01267	Significant
Behavioral Choice	AWA	Increased	.02275	Significant
Nonreactive Choice	AWJ	Increased	.02275	Significant
Wellbeing Transformation	DASS-42	Decreased	.01267	Significant
Emotional Awareness	DEP	Decreased	.08986	Not significant
Calm and Relaxation	ANX	Decreased	.01267	Significant
Stress Regulation	ST	Decreased	.08986	Not significant

DISCUSSION AND CONCLUSION

There are three key findings in this research: (1) the increase in self-awareness, as narrated by the participants, supported by the increase in the raw scores of KIMS and its subscales, further validated by the significant sign-test results across all the constructs of KIMS; (2) the experienced decrease in negative emotional states as narrated by the participants, supported by the overall decrease in DASS-42, and significant sign-test results for ANX, with the divergence of DEP and ST, which both yielded nonsignificant sign-test results; (3) the emergent theme of Breath-Awareness Response effect, supported by the rich and vivid descriptions of the participants, and further supported by the overall significant sign-test results for both KIMS and DASS-42.

Sample Size and Research Design. There exists a limitation in the sample size of the study which is well justified by the rich, in-depth findings valuable for exploratory research. Although findings are not generalizable, preliminary psychological and emotional insights into the effect of Anapana meditation, can

inform future larger-scale and longitudinal studies. The convergent mixed-methods approach gives us a robust framework for the understanding of the richness of the participants’ lived experiences, which demonstrates this design’s strength in capturing both subjective and measurable changes, which are also further areas of interest.

Questions, Propositions, and Hypotheses. As seen in Table 13, there is an interesting alignment among the narratives of the participants, their KIMS and DASS-42 raw scores, (including their respective subscales), and the significant overall sign-test treatment for both KIMS and DASS-42, which support the propositions and hypotheses.

Table 13. Summary of Questions, Themes, and Sign-test.

Research Questions	Proposition	Themes	Hypotheses	Results
RQ1. How do the participants experience changes in the specific areas of mindfulness-describing, acting with awareness, and accepting without judgment	Participants will narrate enhanced self-awareness.	Mindfulness Transformation Cognitive Enhancement Behavioral Choices Nonreactive Choices	$p < .05$	$p = .01267$ (KIMS) <i>Significant</i>
RQ2. How do the participants experience changes with emotional symptoms of depression, anxiety, and stress?	Participants will narrate improve emotional state in relation to depression, anxiety, and stress.	Wellbeing Transformation Emotional Awareness Calm and Relaxation Stress Regulation	$p < .05$	$p = .01267$ (DASS-42) <i>Significant</i> DEP and ST not significant $p = .08986$
RQ3. How do the participants experience changes in their responses to daily triggers in relation to their overall wellbeing?	Participants will narrate experienced healthier responses to daily triggers.	Anapanasati Response-Buffer Application of mindfulness skills Healthier responses to daily triggers or stressors	$p < .05$	$p = .01267$ (KIMS and DASS-42) <i>Significant</i>

Although the sign-test for DEP and ST diverged from the hypotheses, ANX converged with the hypothesis. The divergence require of DEP and ST require caution in interpretation even if the two constructs were substantiated by the description of the participants.

Increased Self-Awareness. There was a significant shift observed by the participants in relation to their cognitive, emotional, and behavioral responses due to Anapanasati, evidenced by the overall increase in the raw scores of KIMS and its subscales, and further supported by the significant sign-test results across KIMS constructs. This significantly reflects the assertion of Cognitive-Mediation Theory that an individual is capable of assessing an event, which could lead to healthier emotional and behavioral responses by accommodating more options for coping strategies. The thematic findings is further supported by neurobiological studies that breath-awareness (Anapanasati) restructures and strengthen neurobiological pathways associated with cognitive and emotional regulation because of PFC activation (Lippelt & Hommel; Melis et al.; Mercadante et al.). This finding also strengthens Porge's Polyvagal Theory on how meditation soothes the vagus nerve which increases HRV, leading to calmer physiological and emotional state (Gerritsen & Band). The impact of Anapanasati on mindfulness demonstrates recalibration of psychological appraisals and enhanced physiological responses.

Decreased DAS Symptoms. Participants experienced decrease in symptoms associated with depression, anxiety, and stress, evidenced by their overall decrease in DASS-42 post-test. Although DEP and ST subscales diverged, ANX converged with the hypothesis of the researcher. Participant B evidently decreased in all severity descriptions across DASS-42 constructs, dropping from three to one brackets. Participant E also dropped in her severity description level by one bracket. Seen through the established theories of Response-Ability and Self-Determination, participants' demonstrated the empowered practice of personal agency by choosing a response to stimulus. Again, neurobiological correlates and polyvagal studies support this theme. Anapanasati engages PFC allowing the stimulus to jump the amygdala and engage the PFC. To add, Anapanasati helps participants engage the ventral vagal complex of the parasympathetic nervous system that results in decrease symptoms of depression, anxiety, and stress. The impact of Anapanasati on wellbeing demonstrates encompassing awareness in cognition, affect, and behavior.

Anapanasati's Buffering Effect. The emergent theme of Anapana-Awareness as a response buffer benefits from the strict methodological process of CGT. Through CGT's emphasis on the interpretive appreciation of the subjectivity of the participants, the qualitative findings balance the quantitative findings by reflecting the realities of numerical layers that support statistical findings (Charmaz). As supported by the Mindfulness-Stress Buffer Theory (Valikhani et al.), meditation dampens automatic responses by increasing self-awareness, which changes how the participants respond to both internal and external stimuli. Such cognitive-affect and behavioral awareness brings overall transformation through labeling or describing, acting with awareness, and nonreactiveness. The rich narratives capture the heart of Covey's Response- Ability Theory, indicating that Anapanasati expands the space between stimulus and creates an aware or conscious response. This space is a ground for freedom of choice, which aligns with Anapanasati's core principle of *Dhamma* – freedom from thoughts, feelings, and automatic reaction (Bikkhu; Covey; Goenka).

Interweaving the buffering effect of Anapanasati to CBT offers another interesting discussion on how cognitive restructuring can be supported by the simplicity of breath-focused technique to modulate how individuals react the way individuals respond. SDT also aligns with CBT and supports the assertion of Anapanasati-Presence that by having control over an object (in this case, the breath), an individual can develop an autonomy and competence, leading to psychological wellbeing and motivation (Deci & Ryan) and enabling healthier cognitive, emotional, and behavioral responses.

Figure 6 illustrates Anapana-Presence as a buffer to responses that could lead to negative wellbeing outcomes. Derived from Anapana, which means breath and sati, which means awareness. This study

proposes to conclude this study with Breath-Awareness Response or BAR theory, fitting for Anapanasati's barring or buffering effect against triggers.

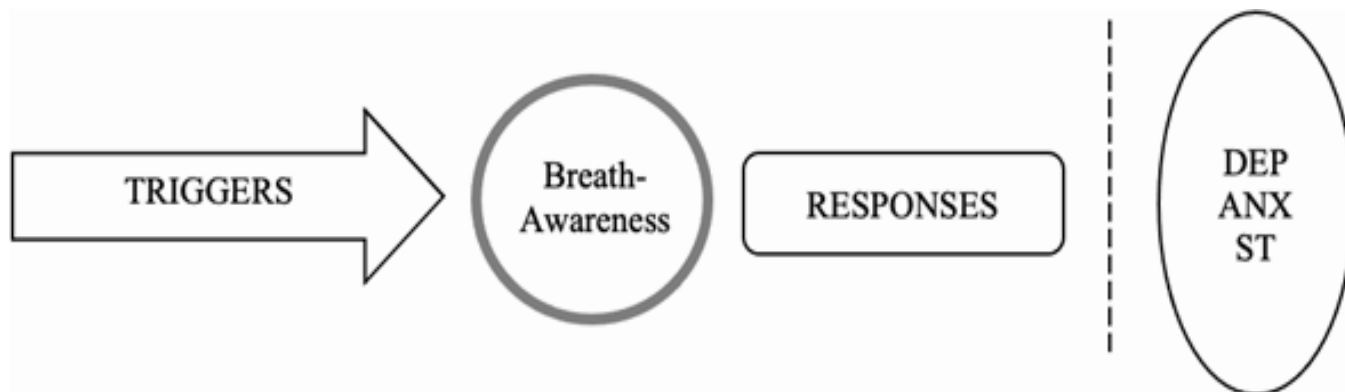


Figure 6. Breath-Awareness Response (BAR) Theory.

Theoretical Implications

Drawing from the support of existing theoretical frameworks and biological constructs, the proposed Breath-Awareness Response Theory is discussed.

Cognitive Restructuring. The role of cognitive processes in maintaining an individual's psychological balance happens when there is an alteration of distortions that result to unwanted behaviors (Beck). Anapanasati or breath-awareness, which cultivates a nonreactive stance (Ling, 2021) to external stimuli can buffer or alter automatic association between dysfunctional thoughts (Ganesan et al.; Liebmann et al.; MacDougall et al.) and negative cognitive, emotional, physiological, and behavioral responses even for children (Naragatti & Garima, 2020; Pandey, 2022; Pathrose et al., 2024; Sivaramappa et al.) and alcoholics (Garland et al.). Mental health practitioners can utilize this insight to address these distortions by integrating breath-awareness for short- or long-term cognitive, affect, or behavioral modification techniques (Bhutekar & Shirsath, 2017; Roca et al., 2023; Sivaramappa et al.; Vieth & Stockhausen, 2023).

Neurobiological, Polyvagal, Cardio – vascular, and Immune System. The activation of the PFC, along with other regions of the brain associated with high executive functions (Ganesan et al., 2023; Vieth & Stockhausen, 2023), and the physiological regulation through the vagal tone and improved HRV provide evidence on how breath-awareness can significantly and positively impact individual's biological or physiological responses (Amarasekera & Chang, 2019; Beldar et al.; Karunarathne et al.). These insights can be leveraged in the clinical setting by integrating breathing techniques (Lu & Rodriguez-Larios, 2022) to treatment involving weakened PFC, including pain management (Karunanayake et al.). Anapanasati meditation sessions can be used in therapeutic interventions to help clients manage mental, emotional, and physical suffering by regulating their nervous system and cardiovascular response (Amarasekera & Chang, 2019) to depression, anxiety, and stress (Rathore, 2021; Sivaramappa et al.).

Empowered Personal Agency. Breath-awareness response increases self-awareness (Brown) and self-regulation supporting Response-Ability and SDT which assert intrinsic motivation drives human behavior when they are given autonomy, competence (Deci & Ryan). Through breath-awareness, an individual practices their control of the monkey mind by using the breath as the object of meditation. Choice and SDT interventions can benefit from Anapanasati by helping clients raise their self-awareness and learn self-regulation (Bharti et al.). This empowered effect is not limited among workers, but goes beyond through different contexts, like schools (Phan et al.; Warghoff et al.), clinical environment, and even the medical profession (Fatima et al., 2023; Kriakous et al.), particularly in self-pain management (Greeson & Chin,

2020; Karunanayake et al., 2022; Pathrose et al., 2024)).

CGT for Focused Intervention. The mapping of this study is grateful for CGT for allowing the findings to highlight the participants' own constructs based on their experiences (Charmaz). The perspective of CGT can be useful in focused interventions according to the specific needs of the clients. Through CGT, clinical practitioners and researchers can extend their findings beyond numerical measures and learn to appreciate the uniqueness of one's person for a more tailored intervention, not just in the field of mental health, but also in other settings. This opens up doors for the creation of qualitative assessments to Breath-Awareness Response Theory that would inform how well participants align and adapt its practices given the unique and diverse psychological profiles of everyone. From the validity of CGT, the implication is extended to the arising BAR theory.

Breath-Awareness Response. *Breath to ten*, as the instruction goes. The discussion of this theory came after the findings aligned with the rigor and meticulous methodological process of CGT. By qualitatively and empirically showing the effectiveness of Anapanasati in increasing mindfulness and decreasing negative emotional symptoms (Parmentier et al.; Wu et al.), this emergent theory is further supported by established and strong foundational and theoretical frameworks of Cognitive-Mediation, Cognitive-Behavioral, Response-Ability, and Self-Determination theories. Empirically speaking, this emergent theme is evidenced by neurophysiological correlates and polyvagal theory. This research thus provides an insight on how the simplicity of breath awareness can modify our responses by strengthening our personal agency and regulating our physiological responses (Helminem et al.; Hu et al.; Ibañez et al.; Krick et al.; Lucas-Thompson et al.;). Through the integration of the findings of this study to existing theoretical frameworks, BAR is expanded to conclude how Anapanasati can be a powerful preventive tool for every individual facing regular daily life stressors (Lu & Rodriguez-Larios; Sivaramappa et al., 2019b).

Integrated Wellbeing Programs. The study's findings present BAR as a tool in the field of mental health, occupational health and wellness of different organizations. Having an integrated wellbeing program (Choi et al.; O'Donnell et al.) is no longer optional but a necessity if leaders aim to provide a conducive workplace (Goilean et al.). Its implications in clinical psychology and psychotherapeutic interventions are heavily supported by well-established theoretical frameworks and scientific evidence. The simplicity of Anapanasati or breath awareness can be brought closer to diverse population and communities to enhance mental and emotional resilience (Bansode & Pawar; Jamil et al., 2023).

It is the humble aim of the researcher that fellow researchers expand the quantifiability and scalability of Anapanasati's positive impact across various contexts.

Limitations of the Study. These findings are subject to several restrictions: (1) the small sample size, confining the generalizability of the results that do not provide enough quantitative strength, particularly in depression and stress measures; (2) the lack of control group to strongly support observed changes as a direct impact of Anapanasati may be affected by confounding variables; (3) the measurement tools may not have been sufficient to detect complex cognitive and emotional states since they were created in the West. Cultural contexts may have affected the participants' responses (Simon & Bernardo, 2022; Gonzales-Rivera et al., 2019). However, this research offers a fertile ground for integrating RCT or longitudinal studies to strengthen these findings and weaken presenting confounding variables.

Recommendations. Suggestions include the increase of sample size for future studies, which includes an RCT for a more conclusive evaluation of Anapanasati's impact. To detect changes overtime, longitudinal studies are also proposed for a deeper awareness of the practicality of breath awareness in transforming mindfulness, wellbeing, and holistic wellness. The divergent results of DEP and ST can be viewed from the lens of technique modification, duration, frequency, and the practitioners' specific needs. These approaches can contribute in identifying through which Anapanasati alleviates unhealthy responses.

Conclusion. The convergent mixed-methods study of CGT, KIMS, DASS-42, and sign test, as revealed both in the qualitative and quantitative results show how Anapanasati bars negative reaction to triggers through increased self-awareness. The choice of a small sample size and a convergent-mixed methods are justified in this exploratory study, which introduces a new practical psychological framework, where future research can build on its findings. Through the 25-day Anapanasati program, participants illustrated heightened their self-awareness and healthier stimuli responses. This is supported by the overall increase in KIMS and DASS-42 across all participants, and the significant sign-test results for both measures. This study strengthens both the already established psychological, response, and behavioral theories, and also the scientific findings in favor of the benefits of breath-awareness practice. This study sets a strong backdrop for future studies, where Anapanasati is not just a practice, but one of the anchors of holistic wellbeing.

Conflict of Interest Statement. The researcher discloses their relationship with the company owner where the participants work. The researcher also discloses meditation teaching as one of his professions. However, the author declares that this personal relationship and teaching meditation profession did not affect the methodology and interpretation of the findings of the study.

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