

# PERMA Model-Based Positive Psychology Interventions In Enhancing Self-Compassion And Resilience Among Pre-Service Teachers

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## Abstract

*Research on PERMA model-based positive psychology interventions has been studied in various disciplines including education, psychology, and positive psychology however, research studies have yet to address the PERMA model-based positive psychology interventions in enhancing self-compassion and resilience among pre-service teachers. Thus, the present study explored how PERMA-based positive psychology interventions enhance self-compassion and resilience among pre-service teachers. A quasi-experimental method with a single group design was employed for the present study and the sample was 20 pre-service teachers undertaking the Bachelor of Education course at Alagappa University College of Education, Alagappa University, Karaikudi, Sivagangai district, Tamil Nadu, India. The convenience sampling technique was utilized for this study. Self-compassion scale developed by Neff, K.D (2003) with a reliability coefficient of and the Resilience Appraisal Scale (RAS) developed by Johnson et al., 2010 with Cronbach's alpha reliability of the present sample is 0.75 were used for data collection. Results revealed that PERMA-model-based positive psychology interventions significantly influence the self-compassion and resilience of pre-service teachers and considerable improvement exists in the self-compassion and resilience of pre-service teachers after the experimentation period. The venue of future research to focus on various dimensions of self-compassion and resilience for extensive knowledge and survey research would encourage to assessment of these constructs in the larger sample.*

**Keywords:** PERMA, self-compassion, resilience, pre-service teachers, self-kindness.

## Introduction

Teacher training programs focus on not only teaching competencies but also enhancing transferable skills like resilience, self-compassion, and psychological well-being which in turn enhance the wholesome empowerment of the pre-service teachers. However, there is a need to investigate positive psychology interventions on major psychological constructs like self-compassion and resilience. The present study focuses on the effectiveness of PERMA- model-based positive psychology interventions on self-compassion and resilience. Teachers have to acknowledge the positive psychology approach to implement teaching effectively. Positive psychology facilitates resilience (Proctor, 2022, p.462). PERMA refers to positive emotions, engagement, relationships, meaning, and accomplishments (Seligman, 2011).

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### **Self-compassion:**

According to Terry and Leary (2011), self-compassion involves being kind, attentive, and caring while facing negative experiences. Self-compassion may enhance stress management and self-regulation (Krieger et al.,2015). The cognitive, affective, and behavioral process that encompasses identifying suffering, cognizance of the ubiquitous nature of human suffering, empathetic feeling, adaptation of uncomfortable feelings, and motive to diminish suffering is known as compassion (Strauss et al., 2016, p.19). Self-compassion entails one's understanding of personal inabilities, expression of emotions that cause pain and distress, treating oneself with attentive and loving attitudes, and identifying that negative experiences are a part of life (Neff, 2003a). Self-compassion has been explored in social psychology as a means to reduce stress and invoke happiness overall (Eriksson et al., 2018; Sirois et al., 2015) and even in the teaching profession (Tandler et al.,2019). Neff (2003a, b) states that self-compassion consists of a structure comprising self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification. Self-kindness entails individuals' effort to understand themselves without prejudice, and a gentle and loving attitude towards their selves rather than harsh self-criticism and self-judgment. Common humanity indicates the awareness of individuals that both happy and troubled experiences in life are not unique to themselves, and all other individuals also go through similar experiences.

### **Resilience**

Resilience is the capacity to manage stressful circumstances and continue to function well in challenging sociocultural contexts (Johnson et al.,2014). Although many different elements might affect resilience, interventions that focus on contextual factors and incorporate resilience programs at the school level seem to be the most crucial for creating supportive settings where teachers and their children can flourish (Kangas-Dick & O'Shaughnessy,2020). Resilience acts as a prime factor for mental well-being and success (Neenan,2018). The nexus between purposeful work and teachers' resilience was significantly mediated by work engagement and job crafting. Improvement of teachers' resilience can assist them in maintaining their passion for worthwhile yet demanding work (Van Wingerden & Poell,2019). Resilience, or the capacity to overcome difficulties, is thought to be increased and developed as a result of overcoming difficult situations in the past (Masten, 2001). The retention and resilience of teachers are affected by various factors. Teachers' efficacy beliefs and attributions

are vital factors for work (Gibbs& Miller, 2014). Resilience has been acknowledged as a critical non-cognitive attribute of novice teachers (Klassen et al.,2018). In Australia, resilience is regarded as a major non-cognitive ability for the recruitment of teacher education students (Australian Institute of Teaching and School Leadership [AITSL],2015). The self-efficacy of pre-service teachers is strongly related to resilience (Yada,2021). Research studies revealed that teachers' resilience is a significant aspect related to their commitment, motivation, and retention in the profession of teaching (Brunetti,2006; Johnson et al.,2014). According to the American Psychological Association (APA), resilience includes the process and outcome of effectively adapting to challenging life experiences. Emerging research studies revealed that resilience skills include problem-solving, goal setting, emotion regulation, and stress management, effective communication, building a social support network, practicing self-care, developing meaning and purpose in life, adopting a positive outlook, improving self-awareness, adopting effective coping strategies (Duckworth,2016; Pemberton, 2015; Southwick & Charney,2018).

### **PERMA MODEL**

Seligman's (2011) new theory proposes that Positive emotion, Engagement, Relationships, Meaning, and Accomplishment (PERMA) are the major elements of well-being.

**Positive emotions:** Human functions are mostly motivated by positive feelings. Positive emotions foster faith in the future, which in turn improves an individual's interpersonal skills, physical and psychological well-being, and professional effectiveness.

**Engagement:** Refers to the relationship, focus, attention, and propensity toward particular pursuits, such as a job or a hobby (Higgins, 2006; Schaufeli et al., 2006). The state of flow, which is defined by a lack of self-consciousness, a sensation of time slowing down, and a keen awareness of the present, is a crucial idea. "Flow" refers to a joyous, totally present-focused state of being in positive psychology. When someone is concentrated on a task, they can experience the flow state of being and start to fully participate in the present (Seligman, 2011).

**Relationships:** Humans have a strong inner search for love and connection, which draws them to other people and their physical and emotional presence. Positive relationships, such as strong links with friends and family or shaky ones with coworkers, promote a sense of belonging (Sandstrom and Dunn, 2014).

**Meaning and purpose:** Meaning is described as attaining goals that are regarded as worthwhile. This includes the motivation for people's engagement in a variety of activities, which is their sense of purpose.

**Accomplishment:** Represents living a purposeful and fruitful life. Achieving greater success while moving closer to one's goals could bring about a sense of accomplishment on an internal level in addition to recognition from others in many cultures. Even while achievement has an objective definition, individual aspirations, motivation, and personality traits also play a role (Butler & Kern, 2014). According to a study, skilled bridge players are motivated to play to the best of their abilities since, even if they lose, they will feel like they performed well (Seligman, 2011)

### **PERMA-Model Based Positive Psychology Interventions**

Positive psychology is considered an umbrella term that focuses on empirical and conceptual research concerning what makes life most worthwhile. most worth living" (Seligman and Csikszentmihalyi, 2000). Considering the PERMA model as the baseline of this present research, the researcher aims to implement PERMA-based positive psychology interventions on self-compassion and resilience among pre-service teachers.

### **Literature Review**

Datu, J.A., Lee, A.S., & Chung, K.K. (2023) examined pre-service teachers' well-being through the conventional way of positive psychology interventions and a smartphone app approach. Results revealed that positivity, purpose, engagement, and resilience were significantly influenced by the online workshop mode but the intervention through the smartphone app didn't enhance psychological outcomes. Research findings suggested that the implementation of the conventional way of positive psychology interventions provided significant effectiveness on the well-being of pre-service teachers than the smartphone app-based approach.

García Martínez, I. (2022) studied the relationship between resilience and the mental health of students. University students (692) from various Degrees of Education participated. Resilience (RS-14), mental health (MH-5), and Spanish adaptation of the Big Five by Benet-Martínez and Johnson (1998) were used for data collection. Results indicated that resilience mediates between personality factors and mental health.

Shanmugam, P., & Hidayat, R. (2022) examined well well-being of Malaysian teachers through PERMA and Malaysian English language teachers' grit.91 primary ESL(English

as Second Language) teachers were involved in this study. Findings showed that significant influence of PERMA on grit and well-being as well.

Golestaneh, S. M., & Behzadi, A. (2019) Conducted a quasi-experimental study on well-being, academic buoyancy, and academic achievement through positive psychology training among 360 female secondary grade school students. Results revealed that positive psychology intervention training showed a significant influence on well-being and academic buoyancy but didn't influence academic achievement.

Şahin et al.,2019 examined on happy work environment among 17 teachers. Structured interviews have been employed for data collection. Research studies revealed that teachers' conveyance regarding a happy work environment focused on circumstances of positive relations and the PERMA model assists in comprehending a happy school environment readily.

Neff, et al,2007 conducted research among 177 undergraduates. Study results revealed that self-compassion had an important positive relation with optimism, joy, positive affect, wisdom, personal initiative, curiosity and exploration, agreeableness, extroversion, and conscientiousness and it shows a significant negative nexus with negative emotions and neuroticism.

### **Need and significance of the study**

Self-compassion and resilience is a contemporary behavioral study rising to precedence in the arena of teaching. Teaching-learning is an emotional aspiration. Pre-Service teachers. Growing research in the field of positive psychology revealed that resilience needs to adapt to various hard situations and to improve commitment, motivation, and effectiveness in teaching among pre-service teachers. so the researcher might expect that the metacognitive intervention strategy for pre-service teachers is teachable as well which in turn enhances resilience. Keeping this in mind this study intends to investigate how positive psychology interventions enhance the resilience of Pre-Service teachers.

### **Objectives of the study:**

The objective of the study is to implement positive psychology interventions (PPT) among pre-service teachers

To assess whether there exists any significant difference in pre- and post-assessment of self-compassion and resilience among pre-service teachers

To assess the effectiveness of positive psychology intervention strategies in enhancing the self-compassion and resilience of pre-service teachers

To find out the gain ratio of self-compassion and resilience by positive psychology intervention strategies among pre-service teachers.

### **Hypotheses of the study:**

The pre- and post-assessment scores of self-compassion and resilience do not differ among pre-service teachers.

There is a significant increase in the gain ratio of pre- and post-assessment scores of self-compassion and resilience through positive psychology intervention among pre-service teachers.

There is a significant influence of positive psychology interventions on self-compassion and resilience among pre-service teachers.

### **Variables of the Study**

The present study consists of self-compassion and resilience as the dependent variable and PERMA-based positive psychology Interventions as the independent variable.

### Methodology of the Study:

The present study employed the quasi-experimental method with a single group design (Pre-assessment - Post-assessment) and the study sample comprises 20 pre-service teachers (N=20) undertaking the Bachelor of Education course at Alagappa University College of Education, Karaikudi, Sivagangai district, Tamil Nadu. The convenience sampling technique was utilized for this study. PERMA-based positive psychology Interventions were employed for pre-service teachers based on previous research studies which included 8 weekly sessions of 30 minutes duration. Interventions based on the PERMA elements such as positive emotions, Engagement, Relationship, Meaning, and Accomplishment. Resilience Appraisal Scale (RAS) by Johnson et al., 2010 with Cronbach's alpha reliability of the present sample is 0.75 and a metacognitive awareness questionnaire constructed and validated by the researcher and research supervisor with a Cronbach's alpha reliability of the present sample is 0.72 were used for data collection. The resilience scale consists of twelve items with a scale ranging from strongly disagree, disagree, neutral, agree, and strongly agree. The Self-Compassion Scale (SCS) was developed by Neff, K.D, (2003) with a reliability of 0.76 for the present sample. Self-compassion scale comprises 26 items with a scale ranging from Almost Never, rarely, sometimes, often, and almost always. Pre- and post-assessment were conducted and the statistical techniques used for this study were mean, standard deviation, t-test, effect size, and gain ratio.

### Delimitation of the Study

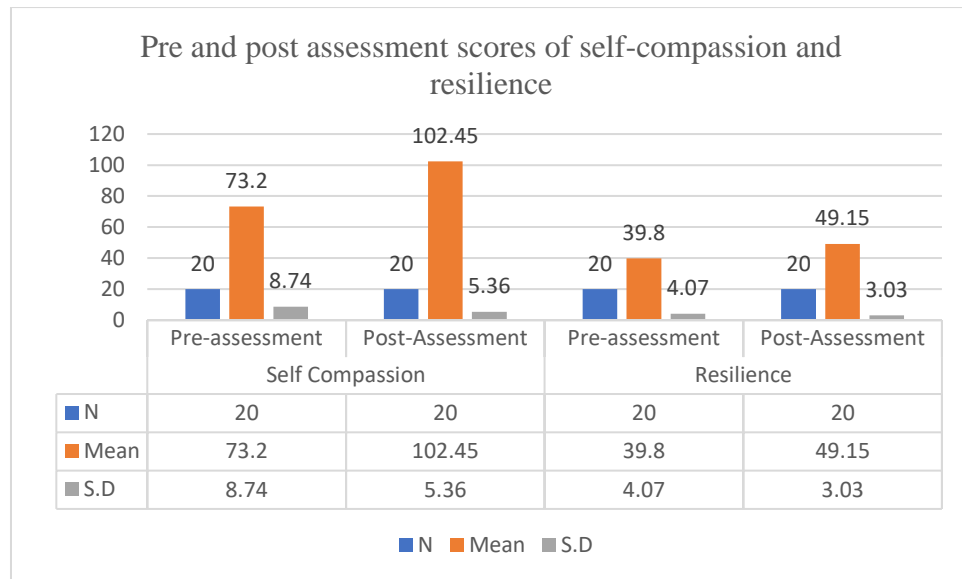
The present study is confined only to pre-service teachers who pursue physical science as their major subject and were selected from Alagappa University College of Education, Karaikudi, Sivagangai district, Tamil Nadu.

### Data Analysis

**Table1:** Pre- and post-assessment scores of self-compassion and resilience among pre-service teachers

Variable	Assessment	N	Mean	S.D	t-Value	Level of Significance
Self-Compassion	Pre-assessment	20	73.2	8.74	2.09	Significant
	Post-Assessment	20	102.45	5.36		
Resilience	Pre-assessment	20	39.8	4.07	2.09	Significant
	Post-Assessment	20	49.15	3.03		

\*Significant at 5% level



The scores indicate that pre-service teachers obtained higher mean scores of self-compassion in the post-assessment compared to the pre-assessment score. The mean scores obtained from the pre-and post-assessment were 73.2 and 102.45 respectively resulting in a mean difference of 29.25. The results also indicate that the total score for pre-service teachers’ post-assessment was significantly improved. Hence the results indicate that pre-service teachers exhibited higher levels of improvement after treatment. From the above table, the calculated ‘t’ Value (2.28) is greater than the table value (1.96) at the 0.05 level of significance. Hence it is inferred that there is a significant difference exists between pre- and post-assessment scores of self-compassions among pre-service teachers.

The scores indicate that pre-service teachers obtained higher mean scores of resilience in the post-assessment compared to the pre-assessment score. The mean scores obtained from the pre-and post-assessment were 39.8 and 49.15 respectively resulting in a mean difference of 9.35. The results also indicate that the total score for pre-service teachers’ post-assessment was significantly improved. Hence the results indicate that pre-service teachers exhibited higher levels of improvement after treatment. From the above table, the calculated ‘t’ Value (2.28) is greater than the table value (1.96) at the 0.05 level of significance. Hence it is inferred that there is a significant difference exists between pre- and post-assessment scores of resilience among pre-service teachers.

**Table 2:** Effect size (d) between Pre and Post assessment scores of self-compassion and resilience among pre-service teachers

Variable	Assessment	N	Mean	S.D	Effect Size (d)
Self-Compassion	Pre-assessment	20	73.2	8.74	0.57
	Post-Assessment	20	102.45	5.36	
Resilience	Pre-assessment	20	39.8	4.07	0.37
	Post-Assessment	20	49.15	3.03	

The above table shows the effect size (d) between pre- and post-assessment scores of self-compassion among pre-service teachers. The effect size value (d) 0.57 indicates that there is a moderate difference between the pre- and post-assessment scores of self-compassion. It reveals that there is a significant influence of PERMA-based positive psychology interventions on self-compassion among pre-service teachers and the effect size (d) between pre- and post-assessment scores of resilience among pre-service teachers. The effect size value (d) 0.37 indicates that there is a medium difference between the pre- and

post-assessment scores of resilience. It reveals that there is a significant influence of PERMA-based positive psychology interventions on resilience among pre-service teachers.

**Table 3:** The gain ratio of pre- and post-assessment scores of self-compassion and resilience through PERMA-based Positive Psychology Interventions among pre-service teachers

Variable	Pre-assessment	Post-Assessment	Gain in	Gain Ratio
Self-Compassion	56.30%	78.80%	22.50%	1: 1.39
Resilience	66%	81.91%	15.91%	1: 1.24

The Gain ratio indicates that there is a considerable improvement in self-compassion (22.50%) and resilience (15.91%) among pre-service teachers through PERMA positive psychology interventions.

### Discussion

The significance of current research findings lies in unfolding a greater understanding of two constructs such as self-compassion and mindfulness. The present research study indicated that the self-compassion and mindfulness of pre-service teachers do not differ based on their gender, age, educational qualification, locale, and marital status. The present investigation highlights that there was a weak but positive relationship between self-compassion and mindfulness of pre-service teachers. Previous research studies revealed that self-compassion is a crucial disposition in the relationship between mindfulness and happiness, and mindfulness is associated with psychologically adaptive elements (Hollis-Walker & Colosimo,2011). The delimitation of the study is the sample was confined only to pre-service teachers from two teacher education colleges located in Sivagangai district, Tamil Nadu, India.

### Conclusion and Recommendations

In sum self-compassion and mindfulness of pre-service teachers do not differ based on their gender, age, educational qualification, locale, and marital status. Also, there was a significant relationship occurred between self-compassion and mindfulness of pre-service teachers. The study recommends developing strategies for the improvement of self-compassion and mindfulness among pre-service teachers would play a vital role in the teaching-learning process. Present research finding paves the way for a new avenue for research and facilitate research that examines the pre-service teachers' self-compassion as a means of emotion regulation. Future research would be needed to explore experimentation on self-compassion and mindfulness for extensive knowledge.

### Conflict of Interest

None declared

### References

- Australian Institute for Teaching and School Leadership (AITSL). (2015). Action now: Selection of entrants into initial teacher education guidelines [2015 and 2020].
- Brunetti, G. J. (2006). Resilience under fire: Perspectives on the work of experienced, inner city high school teachers in the United States. *Teaching and teacher education*, 22(7), 812-825. <https://doi.org/10.1016/j.tate.2006.04.027>

- Butler, J., & Kern, M. L. (2014). The PERMA-Profiler: A brief multidimensional measure of flourishing. Unpublished manuscript.
- Datu, J.A., Lee, A.S., & Chung, K.K. (2023). Leveraging technology for pre-service teachers' well-being: The effectiveness of a multicomponent positive psychology intervention in pre-service preschool teachers in Hong Kong. *Applied psychology. Health and well-being*. <https://doi.org/10.1111/aphw.12446>
- Duckworth, A. (2016). *Grit: The power of passion and perseverance* (Vol. 234). New York, NY: Scribner.
- Eriksson, T., L. Germundsjö, E. Åström, and M. Rönnlund. 2018. "Mindful Self-compassion Training Reduces Stress and Burnout Symptoms among Practicing Psychologists: A Randomized Controlled Trial of a Brief Web-based Intervention." *Frontiers in Psychology* 9: 2340. doi:10.3389/fpsyg.2018.02340.
- García Martínez, I. (2022). Analysis of the psychosocial profile of pre-service teachers. DOI: 10.5944/educXX1.30236
- Gibbs, S., & Miller, A. (2014). Teachers' resilience and well-being: A role for educational psychology. *Teachers and Teaching*, 20(5), 609-621.
- Golestaneh, S. M., & Behzadi, A. (2019). Effectiveness of Positive Psychology Intervention training on increasing well-being, academic buoyancy and academic achievement in female students. *Quarterly of Applied Psychology*, 13 (2): 187-208.
- Johnson, B., Down, B., Le Cornu, R., Peters, J., Sullivan, A., Pearce, J., & Hunter, J. (2014). Promoting early career teacher resilience: A framework for understanding and acting. *Teachers and Teaching*, 20(5), 530-546. <https://doi.org/10.1080/13540602.2014.937957>
- Kangas-Dick, K., & O'Shaughnessy, E. (2020). Interventions that promote resilience among teachers: A systematic review of the literature. *International Journal of School & Educational Psychology*, 8(2), 131-146.
- Krieger, T., Hermann, H., Zimmermann, J., & grosse Holtforth, M. (2015). Associations of self-compassion and global self-esteem with positive and negative affect and stress reactivity in daily life: Findings from a smartphone study. *Personality and individual differences*, 87, 288-292. <https://doi.org/10.1016/j.paid.2015.08.009>
- Klassen, R. M., Durksen, T. L., Al Hashmi, W., Kim, L. E., Longden, K., Metsäpelto, R. L., ... & Györi, J. G. (2018). National context and teacher characteristics: Exploring the critical non-cognitive attributes of novice teachers in four countries. *Teaching and Teacher Education*, 72, 64-74.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American psychologist*, 56(3), 227.
- Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2, 85-102.
- Neff, K. D. (2003b). Development and validation of a scale to measure self-compassion. *Self and Identity*, 2, 223-250.
- Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of research in personality*, 41(4), 908-916.
- Neenan, M. (2018). *Developing resilience: A cognitive-behavioural approach*. Routledge.
- Pemberton, C. (2015). *EBOOK: Resilience: A Practical Guide for Coaches*. McGraw-Hill Education (UK).
- Proctor, C. (2022). Enhancing well-being in youth: Positive psychology interventions for education in Britain. *Handbook of positive psychology in schools*, 451-465.
- Şahin, F. A. T. İ. H., Yenel, K. Ü. B. R. A., & Kılıç, S. A. B. İ. R. E. (2019). Investigation of Teachers' Views on a Happy Work Environment by Perma Model. *Kuram ve Uygulamada Eğitim Yönetimi*, 25(4).
- Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and wellbeing*. New York: Free Press.
- Shanmugam, P., & Hidayat, R. (2022). Assessing grit and well-being of Malaysian ESL teachers: Application of the Perma Model. *Malaysian Journal of Learning and Instruction (MJLI)*, 19(2), 153-181.
- Southwick, S. M., & Charney, D. S. (2018). *Resilience: The science of mastering life's greatest challenges*. Cambridge University Press.



Strauss, C., Taylor, B. L., Gu, J., Kuyken, W., Baer, R., Jones, F., & Cavanagh, K. (2016). What is compassion and how can we measure it? A review of definitions and measures. *Clinical psychology review*, 47, 15-27.

Sirois, F. M., R. Kitner, and J. K. Hirsch. 2015. "Self-compassion, Affect, and Health-promoting Behaviors." *Health Psychology* 34 (6): 661–669. doi:10.1037/hea0000158.

Tandler, N., B. Kirkcaldy, L. E. Petersen, and J. Athanasou. 2019. "Is There a Role for Mindfulness and Self-compassion in Reducing Stress in the Teaching Profession?" *Minerva Psichiatrica* 60 (1): 51–59. doi:10.23736/S0391-1772.19.01998-8.

Terry, M. L., & Leary, M. R. (2011). Self-compassion, self-regulation, and health. *Self & Identity*, 10(3), 352- 362.

Van Wingerden, J., & Poell, R. F. (2019). Meaningful work and resilience among teachers: The mediating role of work engagement and job crafting. *PloS one*, 14(9), e0222518. <https://doi.org/10.1371/journal.pone.0222518>

Yada, A., Björn, P. M., Savolainen, P., Kyttälä, M., Aro, M., & Savolainen, H. (2021). Pre-service teachers' self-efficacy in implementing inclusive practices and resilience in Finland. *Teaching and Teacher Education*, 105, 103398. <https://doi.org/10.1016/j.tate.2021.103398>