



www.bioinformation.net
Volume 21(8)



Research Article

Received August 1, 2025; Revised August 31, 2025; Accepted August 31, 2025, Published August 31, 2025

DOI: 10.6026/973206300212657

SJIF 2025 (Scientific Journal Impact Factor for 2025) = 8.478

2022 Impact Factor (2023 Clarivate Inc. release) is 1.9

Declaration on Publication Ethics:

The author's state that they adhere with COPE guidelines on publishing ethics as described elsewhere at <https://publicationethics.org/>. The authors also undertake that they are not associated with any other third party (governmental or non-governmental agencies) linking with any form of unethical issues connecting to this publication. The authors also declare that they are not withholding any information that is misleading to the publisher in regard to this article.

Declaration on official E-mail:

The corresponding author declares that lifetime official e-mail from their institution is not available for all authors

License statement:

This is an Open Access article which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly credited. This is distributed under the terms of the Creative Commons Attribution License

Comments from readers:

Articles published in BIOINFORMATION are open for relevant post publication comments and criticisms, which will be published immediately linking to the original article without open access charges. Comments should be concise, coherent and critical in less than 1000 words.

Disclaimer:

Bioinformation provides a platform for scholarly communication of data and information to create knowledge in the Biological/Biomedical domain after adequate peer/editorial reviews and editing entertaining revisions where required. The views and opinions expressed are those of the author(s) and do not reflect the views or opinions of Bioinformation and (or) its publisher Biomedical Informatics. Biomedical Informatics remains neutral and allows authors to specify their address and affiliation details including territory where required.

Edited by Ritik Kashwani

E-mail: docritikkashwani@yahoo.com

Phone: +91 8804878162

Citation: Rajagopal *et al.* Bioinformation 21(8): 2657-2660 (2025)

Empowered healing: Boosting confidence and resilience through self-affirmation in post-cesarean mothers

Atchaya Rajagopal¹, Sumathi Chandran², Shankar Shanmugam Rajendran^{*3}, Vanitha Narayanasamy Naidu⁴, Azhgar Jan Thoulath Khan¹, Jessy Raja¹ & Amudha Chinnappan¹

¹Department of Obstetrics and Gynecological Nursing, College of Nursing, Madras Medical College, The Tamil Nadu Dr.MGR Medical University Chennai, Tamil Nadu, India; ²Department of Obstetrics and Gynecology, Government Hospital for Women and Children, The Tamil Nadu Dr.MGR Medical University, Chennai, Tamil Nadu, India; ³Department of Child Health Nursing, College of Nursing, Madras Medical College, The Tamil Nadu Dr.MGR Medical University, Chennai, Tamil Nadu, India; ⁴Department of

Community Health Nursing, College of Nursing, Madras Medical College, The Tamil Nadu Dr. MGR Medical University, Chennai, Tamil Nadu, India; *Corresponding author

Affiliation URL:

<https://mmcrghgh.tn.gov.in/>

Author contacts:

Atchaya Rajagopal - E-mail: r.atchaya1998@gmail.com

Sumathi Chandran - E-mail: surendransumathi@yahoo.in

Shankar Shanmugam Rajendran - E-mail: shankarshaki@yahoo.com

Vanitha Narayanasamy Naidu - E-mail: nvanitha967@gmail.com

Azhgar Jan Thoulath Khan - E-mail: azhgarjan123@gmail.com

Jessy Raja - E-mail: jessyvmalai@gmail.com

Amudha Chinnappan - E-mail: amudhamadhu1976@gmail.com

Abstract:

The impact of self-affirmation as a therapeutic intervention for postpartum mothers who have undergone cesarean sections, aiming to enhance their self-confidence and resilience is of interest. A true experimental design with pre-test and post-test measures was used, involving 60 mothers in both experimental and control groups. The results showed that the experimental group exhibited significant improvements in self-confidence and resilience following the intervention. Positive self-affirmation techniques, including educational materials on diet, hygiene, and newborn care, contributed to these improvements. Thus, we show that positive self-affirmation significantly enhanced psychological well-being and coping abilities among mothers who had cesarean sections.

Keywords: Positive self-affirmation, self-confidence, self-resilience, cesarean mothers

Background:

According to the self-affirmation theory, people are driven to maintain a positive self-perception and to counter threats to their perceived competence [1]. When someone feels threatened, self-affirmations can help them regain their sense of self-competence by enabling them to reflect on their values and other sources of self-worth [2]. However, there are still many unanswered questions about how self-affirmation works. An area of interest analysis revealed that when pondering future-oriented core values (as opposed to daily activities), affirmed individuals (compared to unaffirmed participants) displayed greater activity in key brain regions connected to self-processing and valuation [3]. The term "maternal self-confidence" refers to a mother's confidence in her ability to care for and understand her child. This confidence plays a critical role in accepting the obligations of motherhood, which is important for nurturing and developing newborns as well as improving newborn outcomes [4]. Self-Resilience is said to be based on experiences during important stages of physical and personal development as well as genetics. Resilience is a dynamic process that can be developed and improved over time rather than a permanent attribute [5]. A person's life circumstances play a significant role in shaping resilience, a trait that can develop and evolve over time. The level of resilience varies and is affected by factors such as age, gender, background, and personal experiences [6]. Individuals who are resilient tend to demonstrate enhanced social abilities, particularly in communication, building close relationships and exhibiting empathy, largely shaped by their family experiences. Therefore, it is of interest to demonstrate the positive impact of self-affirmation in enhancing self-confidence and resilience among postpartum mothers who have undergone

cesarean sections. It offers valuable insights into improving psychological well-being and coping abilities in this specific population.

Methodology:

A True Experimental study Design was used to assess effectiveness of positive self-affirmation on self-confidence and self-resilience among post cesarean mothers conducted at the Selected Tertiary care Hospital, Chennai, over four weeks. The study Population comprised those who met the inclusion criteria, including Primi post cesarean mothers and Primi cesarean Mothers who are willing to participate. Mothers who are sick during the study period and Mothers who are under high risk were excluded. A Total of 60 Mothers was included in the study. Participants were selected using a simple Random Sampling Technique to ensure feasibility and timely Data Collection. Tools used were LIPS Maternal self-confidence scale, Brief Resilience scale and the ethical principles were followed accordingly. The data was tabulated and analyzed using both descriptive and inferential statistics. In the study, a true experimental design was used to assess the effectiveness of positive self-affirmation on self-confidence and self-resilience among post-cesarean mothers. The data was analyzed using both descriptive and inferential statistics. In **Table 1**, the comparison of self-confidence scores between the experimental and control groups revealed a statistically significant difference in post-test scores. The experimental group showed a mean score of 36.93 (SD = 4.66), while the control group had a mean of 21.63 (SD = 3.7), with a mean difference of 15.30 ($t = 16.02$, $p = 0.001^{***}$). This difference was highly significant. Similarly, **Table 2** shows the comparison of self-resilience scores between the

experimental and control groups. The experimental group had a post-test mean of 24.37 (SD = 1.8), and the control group had a post-test mean of 17.50 (SD = 2.8), with a mean difference of 6.87 (t = 11.39, p = 0.001***). This difference was also statistically

significant. **Figure 1** depicts the post-test level of self-resilience scores, while **Figure 2** illustrates the post-test level of self-confidence scores.

Table 1: Comparison of self-confidence scores between experimental and control group

Self-confidence score	Group				Mean difference	Student independent t-test
	Experimental		Control			
	Mean	SD	Mean	SD		
Pretest	20.93	4.07	21.23	3.8	0.3	t=0.60 p=0.55(NS)
Post test	36.93	4.66	21.63	3.7	15.3	t=16.02 p=0.001***(S)

P≤0.001 very high significant S= significant
In posttest, Experimental group had 36.93score and control group had 21.63 score, so the difference was 15.30 score, this difference was large and it was statistically significant.

Table 2: Comparison of self-resilience score between experimental and control group

Self-Resilience score	Group				Mean difference	Student independent t-test
	Experimental		Control			
	Mean	SD	Mean	SD		
Pretest	16.47	1.9	16.8	2.5	0.33	t=0.59 p=0.55(NS)
Post test	24.37	1.8	17.5	2.8	6.87	t=11.39 p=0.001***(S)

In post-test, Experimental group had 24.37 score and control group had 17.50 score, so the difference was 6.87 score, this difference was large and it was statistically significant.
It was tested using student independent t-test.

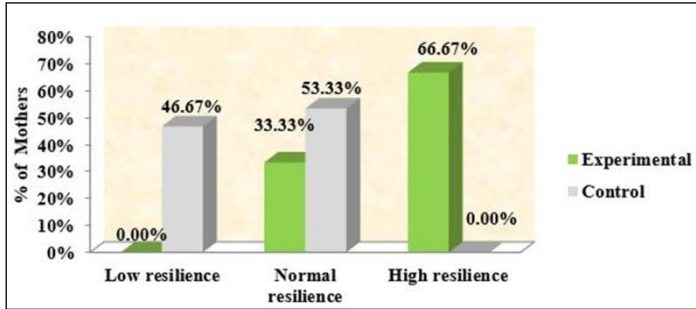


Figure 1: Post-test level of self-resilience score

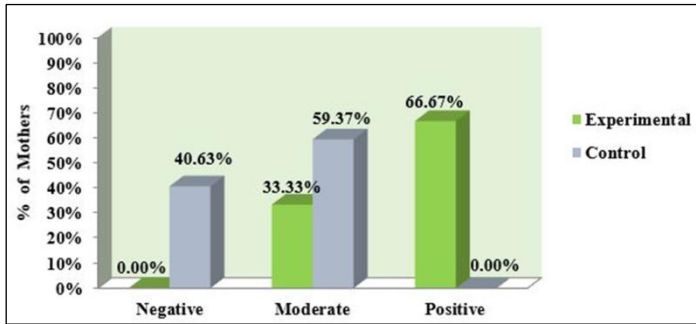


Figure 2: Post-test level of self-confidence score

Results and Discussion:

In the pretest, 76.67% of the experimental group had negative scores, while 73.33% of the control group had negative scores. Both groups had no positive scores. These findings align with Escobar-Soler *et al.* (2023) [7], who found a significant difference in resilience levels before and after self-affirmation (p ≤ 0.005), with the control group showing no significant change (p ≥ 0.005). The experimental group showed a 33.33% gain in self-confidence, compared to 0.83% in the control group, indicating

the effectiveness of positive self-affirmation. Similarly, the experimental group had a 26.33% gain in self-resilience, while the control group showed a 2.33% gain. These results support the findings of Hennessy *et al.* (2018) [8], who observed a significant improvement in confidence levels after affirmations (p = 0.00). Post-test, the experimental group had a mean self-confidence score increase of 16.00 points (from 20.93 to 36.93), which was statistically significant, while the control group had a small, non-significant increase of 0.40 points (from 21.23 to 21.63). Additionally, recent studies have explored the relationship between self-affirmation and psychological well-being, with Hajure *et al.* (2024) finding significant improvements in self-affirmation techniques on mental health outcomes [9]. Thitipitchayanant *et al.* (2018) also support the importance of such interventions in enhancing resilience and psychological well-being among various populations [10]. Finally, Jose *et al.* (2025) further highlighted the impact of psychological interventions on post-cesarean mothers, demonstrating the relevance of these findings in clinical settings [11].

Conclusion:

The positive self-affirmation significantly improves self-confidence and resilience in cesarean mothers. By incorporating self-affirmation into postpartum care, mothers experience enhanced psychological well-being and better cope with recovery challenges. Thus, we show the importance of integrating emotional health strategies into standard postnatal care practices.

R[1] & R[3] are same references ..

References:

[1] Cascio CN *et al.* *Soc Cogn Affect Neurosci.* 2016 **11**:621. [PMID: 26541373]
[2] Dutcher JM *et al.* *Psychol Sci.* 2016 **27**:455. [PMID: 26917214].

- [3] Cascio CN *et al. Soc Cogn Affect Neurosci.* 2016 **11**:621. [PMID: 26541373]
 - [4] Tognasso G *et al. Int J Environ Res Public Health.* 2022 **19**:9651. [DOI: 10.3390/ijerph19159651]
 - [5] Luthar SS *et al. Dev Psychopathol.* 2000 **12**:857.[DOI: 10.1017/s0954579400004156]
 - [6] Schetter CD *et al. Soc Personal Psychol Compass.* 2011 **5**:634. [DOI: 10.1111/j.1751-9004.2011.00379.x]
 - [7] Escobar-Soler C *et al. Healthcare (Basel).* 2023 **12**:3. [PMID: 38200909]
 - [8] Hennessy EA *et al. Campbell Syst Rev.* 2018 **14**:1. [DOI: 10.4073/csr.2018.9]
 - [9] Hajure M *et al. Front Psychiatry.* 2024 **15**:1373083. [DOI: 10.3389/fpsy.2024.1373083]
 - [10] Thitipitchayanant K *et al. Pak J Med Sci.* 2018 **34**:1488. [PMID: 30559809]
 - [11] Jose T *et al. Cureus.* 2025 **17**:e81401. [PMID: 40296982]
-