

Effect of Yogic Intervention in Psychological Wellbeing (Parental Guilt, Psychological Distress, Anxiety, and Self-esteem) of Working Mothers

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KEY WORDS

Guilt about parenting
Kessler
Employed
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Dilemma

ABSTRACT

Background: Motherhood brings a lot of challenges, especially for employed women worldwide. They face difficulties both at home and at the workplace. Eventually, they end up with emotional and psychological disturbances that can even compromise their career for better comprehension.

Purpose: The objective of the study was to assess the effects of Yogic Intervention on parental guilt, psychological distress, anxiety, and self-esteem in working mothers.

Methods: A sample of 39 working mothers (age 30 to 50) from different professions having symptoms of guilt, distress, and anxiety, had participated in a Randomized controlled trial pre-post experiment. They were allocated to the Yoga group (n = 22), which had an online 1-hour session, 5 days a week for 1 month, and to the Control group (n = 17) with no such intervention. The measures included Guilt About Parenting Scale, Kessler Psychological Distress Scale, Depression Anxiety Stress Scale, and Rosenberg Self-esteem Scale.

Results: Showed a significant difference in the reduction of parental guilt (p = .039), psychological distress (p = .014), and anxiety (p = .012) in the yoga group compared to the control group. In the case of self-esteem on average, the score had improved but was not significant enough.

Conclusion: Regular practice of simple asanas with proper breathing, pranayamas, meditation, and relaxation techniques improves the mental and psychological health of working mothers. Further study is recommended with more sample count and a comparative study between working and non-working mothers can be executed.

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Introduction

"We still ask women to work like they don't have kids and to parent like they don't work" – this one quote from the book *Forget Having It All* by American journalist and author Amy Westervelt summarizes the working mothers' dilemma (1). Motherhood is a great yet challenging phase in a woman's life. It becomes more complex and critical for working mothers who are chasing to balance the job they want and raising the kids that they envisaged (2). Social norms limit women's work domain to domestic services which are considered their foremost responsibilities and this is innate in our society irrespective of the region, culture, or religion (3). As referred by Poduval & Poduval (2009), based on the "Family and Medical Leave Act of 1993", in the United States of America, the role of a mother in childcare and family is recognized as primary and superior to men and these dual responsibilities affect the career of females than their male counterparts. Most of the time, they are in a dilemma between choosing their family and kids over their profession or vice versa. In such scenarios, "making a choice is the most difficult thing, and the hardest part is living the choices amidst the everyday guilt, judgment, and the chaos of daily life" (5).

Because of this multiple-role juggling, working mothers face parental guilt, burnout, and physical and mental stress. According to a survey, roughly 9.8 million working mothers in the U.S.A., are suffering from burnout out of 35 million working mothers. Just being employed mothers, women experience 28% more burnout than fathers (6). Another survey by Manchester University and Essex University on UK Household discovered that working mothers with one child recorded 18% more stress than others and working women with two children had 40% higher stress in comparison (7). Being a part of the study, Researcher Chandola affirmed that work-family conflict results in elevated psychological strain, higher levels of stress along with a lower level of well-being. Professor Rae Copper from the University of Sydney agreed with the previous survey outcomes, asserting that the survey findings are also applicable to Australian working mothers (7). The situation is the same in India too. During this pandemic, the situation gets worse. According to the LinkedIn Workforce Confidence Index, roughly 31% of working mothers are currently providing childcare full-time, as compared to only 17% of working fathers. Based on a recent survey by LinkedIn on Indian professionals, more than 44% of working mothers are working outside their business hours to provide

childcare, which is nearly twice the number of men (25%). To be more specific, 46% of working mothers report working till late to make up for work, and 42% are unable to focus on work with their children at home (8).

Many working mothers scrutinize themselves by focusing too much on the word 'should'. This one word makes working mothers feel guilty in both ways – for working and for not. At the workplace, they feel like they should be at home taking care of kids, and at home, they feel like they should be more productive in the office (2). The daily struggle of trying to find a balance between home lives and work lives, all while dealing with the guilt, is a reality that many working women face (9,10). As observed by Weis (2015), they feel guilty while leaving the kids at home, missing their daily activities, not spending enough time to console them when required, and so on. Those who keep their kids in a caregiver or child care centre feel even guiltier and worried about their safety and security (12).

Even our society criticizes working mothers for not giving adequate time to childcare, which causes more guilt in women. Employers also consider them as less efficient and less competent for new roles or promotions etc (13). not only does the society and the employer perceive women differently when they enters into the phase of motherhood, but women also weigh themselves up as solely responsible for the unhappiness, dissatisfaction, or problems of their children (4). They conclude that they must remove all obstacles coming in the path of their children's life (14). As a result, there is a rising trend of working mothers sacrificing their careers, and their passion due to such guilt, dilemma, and lack of self-confidence (5). According to a recent study by Ashoka University, in India, 73% of women discontinue their jobs on giving birth, and 50% of them resign from jobs at the age of 30 to bring up their children. If the population somehow manages to return, 48% of them quit within four months of rejoining (15).

Arvidsdotter et al. (2016) explained psychological distress as an imbalance between the self and the ideal self that breaks down one's self-esteem. This imbalance was described in three aspects: struggling to cope with daily life, inferiority feeling, and losing control over life. In due course, this daily struggle with self may lead to dissatisfaction and lack of control over self and nearby. Working mothers face the same pressure especially because of their perceived feeling of neglecting motherly roles (4). While playing this dual role, working mothers experience highly demanding situations both in the work field and at home due to insufficient support from both the employer side and the nuclear setup at home. This gradually triggers parental guilt which influences their mood, increases stress and anxiety, interrupts sleep, and disrupts their presence of mind (2,4).

Yoga is a holistic approach to not only physical but mental, social, and spiritual well-being that focuses on the mind and its functions along with the body (17). Its multi-dimensional

mind-body practices include loosening exercises, physical postures, breathing exercises, relaxation techniques, meditation, and the cultivation of positive thought processes, attitudes, and lifestyles. Previous research has shown that Iyengar Yoga has a significant effect on distressed women by declining their stress, anxiety, and depression, and improving psychological well-being (18). There is even proof of the efficacy of individualized yoga practice to reduce anxiety, and depression along with existing treatment (19). *Hatha Yoga* practices including forward-backwards bending, standing postures, breathing exercises, inversions, relaxation, mindfulness, meditation, and culturing positive attitudes towards life are useful to improve anxiety, stress, and depression (Shohani et al., 2018). Again further studies have demonstrated the notable effect of *Yoga Nidra* in reducing stress for working mothers. *Yoga Nidra* is a meditation technique including muscle relaxation, breathing practices, imagination, and resolve-making, which provides deep relaxation and experimentally has been proven to reduce stress levels (21). There are multiple pieces of evidence of improving self-esteem starting from school students (22), adolescents (23), university students (24), and middle-aged women (25) life after introducing the yoga module as an intervention. The practice of a holistic approach to Yoga, including physical practices (*asanas*) associated with breathing practices (*pranayamas*) and meditation techniques, has a definite correlation with positive self-esteem and enhanced psychological well-being (26).

As per my search of different scientific literature, this study is the first attempt to find out the benefit of Yoga in improving parental guilt levels. Yoga is a lifestyle mostly concerned with mind-body composition and promotes positive health for both the physical and mental health, unlike other conventional treatments (27). So, it is much more captivating and accepted by many people as an intervention. Considerable research has explored the significance of Yoga on psychological distress, anxiety, and self-esteem in various kinds of populations, but significantly fewer studies have focused on working mothers from varying professions regarding this. We already discussed that a lot of research papers talked about the feeling of guilt which leads to a high level of stress, anxiety, and in some cases depression, psychological disorder especially in working women rather than men (28). It was already concluded that employed mothers aged between 34 to 43 years, experience maximum stress coping with children, responsibilities of the husband, in-laws, as well as at the workplace (16). They may be at prominent risk of psychological distress and the initiative to avoid such disorders should be taken at an early stage. (Deuskar, 2010).

The purpose of the study is to provide 4 weeks of Yogic intervention to such working mothers who are facing symptoms of guilt, distress, and anxiety daily. Investigate the effectiveness of the intervention in the reduction of parental guilt, psychological distress, and anxiety, and promotion of self-esteem for the sample. It was hypothesized that after

providing a month of Yogic intervention to working mothers, their parental guilt, psychological distress, and anxiety will be reduced and their self-esteem will be increased.

Methods

Participants

A total of 52 working mothers (N = 52) from varying professions were enrolled in the workshop. They were recruited through social contacts (office colleagues, friends, and relatives) and screened through questionnaires and respective scores. Out of them, 6 were excluded based on exclusion criteria. At the end of the one-month online session, there were 22 participants in the experimental group (yoga group n = 22), 17 participants in the control group (control group n = 17), and 7 participants who had dropped out from the experiment (dropped; n = 7) (Figure 1). Their age range was 30 to 50 years (Mean \pm SD = 35.15 \pm 4.45) and kids' age varied from toddlers to college students (Mean \pm SD = 5.73 \pm 4.85). Few mothers had two children with a toddler and preschool or preschool and school combination.

Materials

Four self-reporting questionnaires were used to collect the data and analyze the output of the project.

The guilt about Parenting Scale (GAPS) consists of 10 questions. Scoring ranges from 1 to 7 (Strongly Disagree to Strongly Agree) to measure the experience of parenting guilt. Then sum all the items and the total range can vary from 10–70. A higher score indicates a higher level of parental guilt. Studies suggest that GAPS is a “promising tool” for parenting guilt assessment which highlights the influence of work and family conflict faced by parents (29,30).

Depression Anxiety Stress Scale (DASS 21) is a combination of three self-report scales used to measure the states of depression, anxiety, and stress. It contains 7 questions for anxiety and the score ranges from 0 to 3 ('Did not apply to me' to 'Applied very much or most of the time'). Then the scores of all 7 items are summed and multiplied by 2 to calculate the final score. High scores indicate high levels of anxiety. Recommended cut-off scores for conventional severity labels (normal 0–7, mild 8–9, moderate 10–14, severe 15–19, extremely severe 20+). In this study, only the anxiety part has been used. The anxiety scale assesses situational anxiety, autonomic arousal, and subjective experience of anxious affect (31).

Kessler-Psychological-Distress-Scale-K10 involves 10 questions about emotional states and scoring ranges from 1 to 5 ('none of the time' to 'all of the time'). The total range can vary from 10–50. High scores indicate high levels of psychological distress. K10 Score Interpretation as per The 2001 Victorian Population Health Survey is 10–19 well, 20–24 mild disorder, 25–29 moderate disorder, and 30–50 severe disorder. Evidence indicates that this scale is also useful for a short-term measure of anxiety along with distress (32,19).

Rosenberg Self-Esteem Scale was designed by Morris Rosenberg in the 1960s. Since then the scale has been used widely by measuring both positive and negative feelings about the self for the adult population. The scale is having 10 questions and the scoring ranges from 0 to 3 (Strongly Disagree to Strongly Agree). Items 2, 5, 6, 8, and 9 are reverse-scored. After reverse scoring, all the items are summed. A higher score indicates higher self-esteem. The scale has proven high reliability and validity across many studies irrespective of the sample's gender, age, or ethnicity (33,24).

Procedure

A small poster mentioning a free one-month yoga workshop for working mothers along with a registration form and a message mentioning that it is part of the MSc. project under SVYASA University was shared in social contacts. Interested participants were asked to fill-up the four questionnaires and share the details. A total of 52 participants were registered for the workshop. The final selection was done based on the criteria of two parameters, the participants' score for the Guilt About Parenting Scale (GAPS) and the Psychological Distress Scale. For GAPS, if they were having a 30 and above score along with a K10 score of the mild or moderate level they were accepted for the study. A total of 6 Mothers who were housewives, mothers of newborns, or if not matching the selection criteria score, were excluded from the study.

The study is a randomized control trial with a Pre-Post Experimental design, having two groups. So the selected participants were randomly distributed into two groups, 28 participants were put in the Experimental or Yoga group and 18 participants in the Control group. The Yoga group attended 1 hour Yoga class, 5 days a week for 1 month. Practices include Loosening Practices, Simple *Asanas*, *Pranayamas*, Breathing techniques, Meditation, and Relaxation techniques. The same sets of practices were followed for 1 month and detailed intervention is mentioned below. In that 1 month, around 53% of participants had full attendance, 21% had around 70% attendance and 26% of participants had around 55% attendance. For the Control group, no such intervention was there during the study period. After one month all the participants from both Yoga and Control groups were asked to fill up the questionnaires once again to collect post-intervention data. Participants' scores on each were assessed to detect any changes from baseline using the numerical and categorical scales (low, medium, and high) for each tool. A session was conducted later on for control group participants, but a few of them didn't join because of personal reasons, few of them didn't continue because it was conducted late.

Total N = 52

Experimental Group (Yoga intervention Group) n = 22

Control group (Not giving any intervention) n = 17

Excluded = 6, Dropped Out = 7

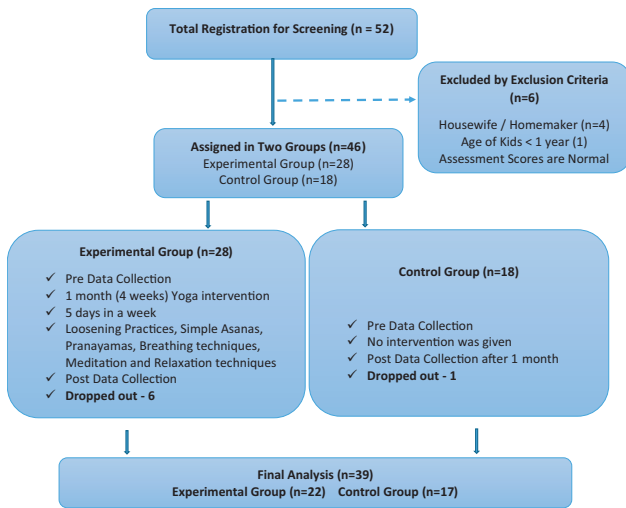


Figure 1: Flow diagram of the Experiment.

Each questionnaire had a set of pre-intervention and post-intervention data from which we calculated the mean score, standard deviation of pre and post-data for both the Intervention and Control groups. Then a t-test was performed to calculate the p-value for the following two scenarios and based on the value; it was concluded if the intervention was significant.

1. Within the same group (pre and post data) – Paired sample t-test.
2. Between the groups (intervention and control) – Two-sample equal variance t-test.

Calculation of Mean, Standard Deviation, and p-Value was done in Microsoft Excel and a corresponding graph was also generated.

Intervention

1-hour Yoga class, 5 days a week, continued for 1 month or 4 weeks. The module is explained in (Table 1).

Table 1: Protocol of the Yogic Intervention.

3 rounds of deep breathing and Opening Prayer		2 min
Loosening practices		9 min
1. Neck,		
Up down	5 rounds	1 min
Right left	5 rounds	1 min
2. Shoulder rotation		
Clock-wise	5 rounds	1 min
Anti-clockwise	5 rounds	1 min
3. Wrist movement		
Up down	5 rounds	1 min
Rotation, clock anti-clock	10 rounds	
4. Waist movement		
Forward-backward	5 rounds	1 min

5. Hip rotation	5 rounds	1 min
6. Ankle		
Up down	5 rounds	1 min
Rotation, clock anti-clock	10 rounds	
7. Twisting	5 rounds	1 min
Breathing Practices		18 min
Standing		
1. Hands in and out	5 rounds	2 min
2. Ankle stretch	5 rounds	2 min
3. <i>Ardhakathichakrasana</i>	5 rounds	2 min
Sitting		
4. <i>Sasankasana</i>	5 rounds	2 min
5. Tiger	5 rounds	2 min
Prone		
6. <i>Bhujangasana</i>	5 rounds	2 min
Supine		
7. Single Leg raising	5 rounds	2 min
8. Cycling	5 rounds	2 min
9. Lumber stretch with folded leg	5 rounds	2 min
Quick Relaxation Technique (QRT)		4 min
Pranayama		
		10 min
1. <i>Nadisudhhi</i>	9 rounds	5 min
2. <i>Bhramari</i>	9 rounds	5 min
Meditation		
		5 min
<i>Nadanusandhana, AUM</i> chanting	3 rounds each	5 min
Deep Relaxation Technique (DRT)		8 min
Closing Prayer		

Results

For the yoga group, post-intervention of yoga, results showed a statistically significant improvement in GAPS scores ($p = 0.006 < .05$), DASS21-Anxiety scores ($p = 0.003 < .05$) and K10 scores ($p = 0.0001 < .05$). On the other hand for RSES scores there is no statistically significant difference ($p = 0.072 > .05$) (Figure 2).

For the Control group, no statistically significant difference was observed in GAPS scores ($p = 0.412 > .05$), DASS21-Anxiety scores ($p = 0.565 > .05$), K10 scores ($p = 0.569 > .05$), RSES scores ($p = 0.440 > .05$) (Figure 2).

Between Yoga and Control groups, post intervention, there was a statistically significant difference for the GAPS score ($p = 0.039 < .05$), DASS21 score ($p = 0.012 < .05$) and K10 score ($p = 0.014 < .05$). For RSES, no significant difference ($p = 0.084 > .05$) in after scores.

Discussion

The motive of this work was to explore the efficacy of 4 weeks of yoga intervention in the reduction of parental guilt, psychological distress, anxiety level, and improvement in self-esteem for working mothers. As per my knowledge, this was the first trial to reduce the parameter of parental guilt by giving yogic

Table 2: Represents Mean, SD and P-value for GAPS, DASS21, K10, and RSES scales of Yoga Group (YG) and Control Group (CG)

	Yoga Group (n = 22)			Control Group (n = 17)			p-value between groups
	Before (Mean ± SD)	After (Mean ± SD)	p-value	Before (Mean ± SD)	After (Mean ± SD)	p-value	
Guilt About Parenting Scale (GAPS)	48.27 ± 8.38	42.05 ± 9.20	.006	46.29 ± 4.09	47.12 ± 3.67	.412	.039
Depression Anxiety Stress Scale 21 – (DASS 21) Anxiety	12.82 ± 6.28	8.55 ± 4.91	.003	12.71 ± 4.79	12.35 ± 3.82	.565	.012
Kessler Psychological Distress Scale (K10)	25.23 ± 4.17	18.36 ± 5.57	.0001	23 ± 2.96	22.53 ± 4.19	.569	.014
Rosenberg Self-Esteem Scale (RSES)	17.09 ± 4.41	18.32 ± 3.40	.072	16.41 ± 2.43	16.71 ± 1.76	.440	.084

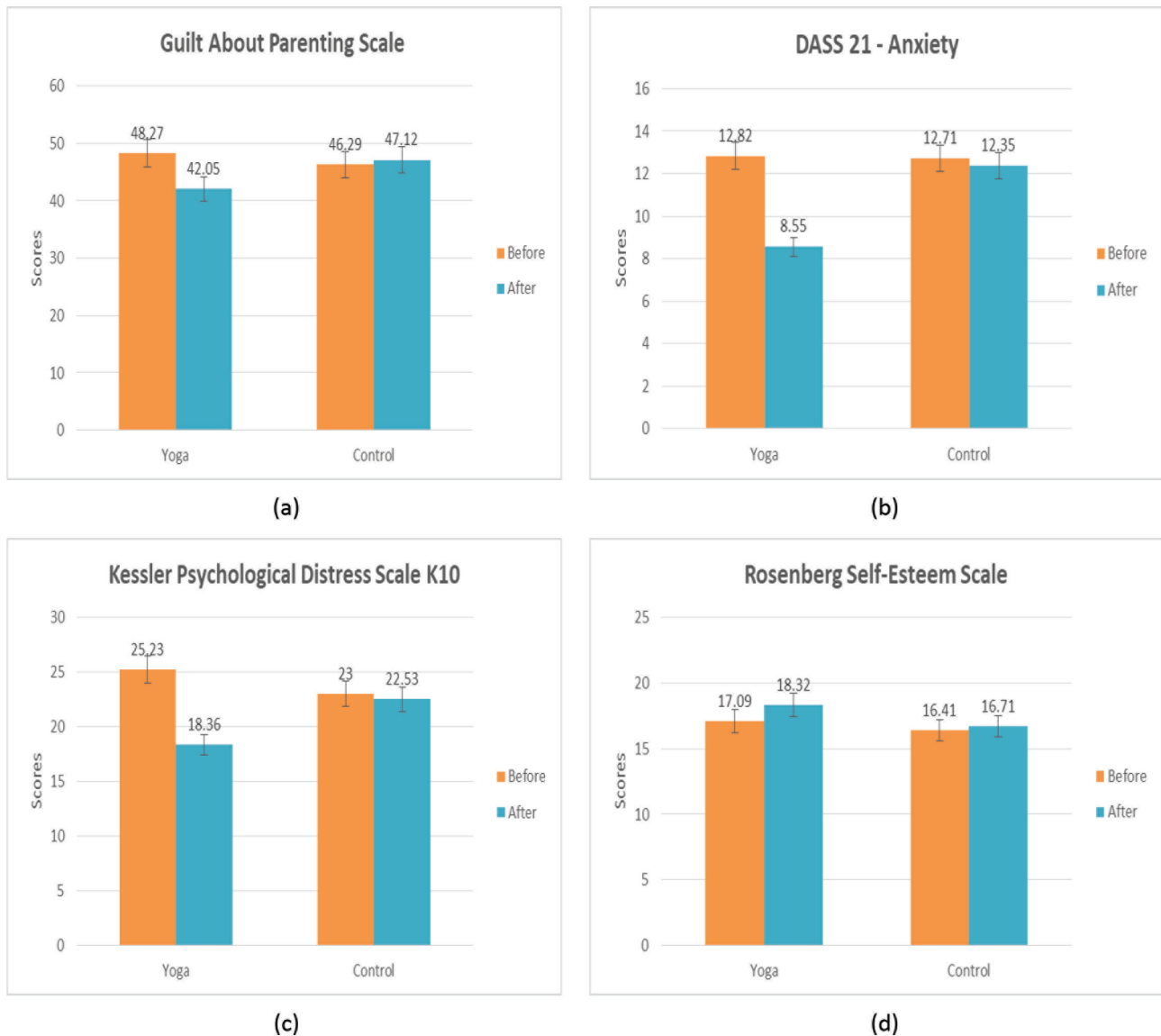


Figure 2: Bar Diagrams showing changes in (a) GAPS, (b) DASS 21, (c) K10, (d) RSES of Yoga Group (YG) and Control Group (CG) before and after one month of intervention.

intervention to working mothers. The findings of the research exhibit that regular yoga practice is beneficial to get rid of parental guilt to some extent. The benefit was statistically significant when compared with before data and also when compared

with the control group (Table 2). The overall result also suggests the effectiveness of yoga intervention in the reduction of symptoms of psychological distress and anxiety level as well in working mothers. The outcome was statistically significant in both

cases. This study supports the previous studies by Shohani et al., (2018) who observed a decrease in stress, anxiety, and depression in women from yoga intervention. It also confirms the findings by Ponte et al., (2019) who evaluated the efficacy of yoga at the primary care level and found a significant reduction of psychological distress in a sample of the yoga group. Reduction of back pain, and neck pain, and improving sleep quality were mentioned as additional health benefits by the sample.

In the present study, though the participants had moderate guilt, anxiety, and distress level; their self-esteem was not very low. The pre-data (before intervention) was on average the normal level. After the intervention, there were improvements in the average value but that improvement was not statistically significant. Working mothers who are struggling to cope with many things and have a moderate level of guilt, anxiety, and stress; may not always translate into low self-esteem. They are having guilt while keeping their baby at home and leaving for work but at the same time, they enjoy their own identity as well. That can be the reason for their normal self-esteem on average.

Many studies proposed possible biological and psychological theories behind the mechanisms of how yoga works on mental health. Among those theories most popular are – yoga helps to maintain a balance between the sympathetic and parasympathetic nervous system and to regulate HPA (hypothalamic-pituitary-adrenal) axis which helps to deal with stressors (35,36). The practice of Yoga increases GABA levels in the brain which can be considered a treatment for anxiety and depression disorder (37). Also According to the neurological perspective, body awareness during yoga practices increases the thalamus, primary sensory organs stimulation which is related to positive mental health (38).

Conclusion

The key strength of the present work is the initiative to evaluate the effectiveness of Yogic intervention on parental guilt in working mothers and the result was significant. The profession of the mothers are from varying domain and their status of doing work from home or not, along with their different working hours provide reasonable generalizability of findings in terms of the type of profession they are engaged in.

The result indicates that yoga leads to better psychological health. But the study has its limitations as well. The study happened online, so only questionnaires could be used for data collection and no other physical parameter or clinical diagnosis can be arranged. The analysis was done based on the self-reporting measurements so the outcomes can be biased. Also, less communication with the control group cannot be ruled out. A small sample size which leads to uneven distribution in intervention and control groups is another limitation as a large sample can provide more reliable and accurate data.

The present study showed subjective improvement in guilt, psychological distress, and anxiety which was self-reported by the participants. Future studies can verify the non-self-report measures like a clinical diagnosis of anxiety

level, and energy level. Some other parameters also can be included especially sleep disorder or insomnia which was commonly mentioned by most of the participants. This study can be done on non-working mothers as well and can go for a comparative study between working and non-working mothers. In that study, we can again check self-esteem for a better understanding of the parameter. Also in this study age range of the children is high (from toddler to college students), so forming different groups, such as mothers of toddlers, preschool children, school children, adolescents, and mixed group children (where children from different groups are present) and to do analysis between the groups would add more meaning and value to the study. In the future, such intervention may be beneficial in a larger population and from a different region to establish the findings as generic.

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Ethical statement

Statement from my side to the participants as follows: “So, before going ahead, I’d like to inform you that this is part of my MSc. in Yoga final semester Research Project under SVYASA University, Bangalore. And please be assured your personal details are safe with me.”

Authors’ contribution

The author has accepted responsibility for the entire content of this submitted manuscript and approved submission, and there is no co-author associated with this study.

Abbreviations

GAPS – Guilt about Parenting Scale
K10 – Kessler Psychological Distress Scale
DASS21 – Depression Anxiety Stress Scale
RSES – Rosenberg Self-esteem Scale

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None.

Conflict of interest

No conflict of interest.

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References

1. Westervelt A. Forget “Having It All”: How America Messed Up Motherhood—and How to Fix It. New York, NY: Seal Press; 2018. 320 p.
2. Ziegler SG. How to Let Go of Working-Mom Guilt [Internet]. Harvard Business Review. 2020 [cited 2021 Jul 28]. Available from: <https://hbr.org/2020/09/how-to-let-go-of-working-mom-guilt>

3. Miller AL, Borgida E. The Separate Spheres Model of Gendered Inequality. *PLoS ONE* [Internet]. 2016 [cited 2021 Jul 28];11(1). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4723260/>
4. Poduval J, Poduval M. Working Mothers: How Much Working, How Much Mothers, And Where Is The Womanhood? *Mens Sana Monogr*. 2009;7(1):63–79.
5. Sharma R, Dhir S. An Exploratory Study of Challenges Faced by Working Mothers in India and Their Expectations from Organizations. *Glob Bus Rev* [Internet]. 2019 Jul 25 [cited 2021 Mar 20]; Available from: <http://journals.sagepub.com/doi/10.1177/0972150919847799>
6. Leonhardt M. 9.8 million working mothers in the U.S. are suffering from burnout [Internet]. *CNBC*. 2020 [cited 2021 Jul 28]. Available from: <https://www.cnbc.com/2020/12/03/millions-of-working-mothers-in-the-us-are-suffering-from-burnout.html>
7. Reilly N. The increased stress felt by working mothers has finally been measured [Internet]. *The Sydney Morning Herald*. 2019 [cited 2021 Jul 28]. Available from: <https://www.smh.com.au/lifestyle/life-and-relationships/the-increased-stress-felt-by-working-mothers-has-finally-been-measured-20190205-p50vrw.html>
8. Mathur N. Nearly 50% of India's working women more stressed due to pandemic: LinkedIn [Internet]. *mint*. 2020 [cited 2021 Jul 28]. Available from: <https://www.livemint.com/companies/news/nearly-50-of-india-s-working-women-more-stressed-due-to-pandemic-linkedin-11599722943378.html>
9. Chalofsky N. An emerging construct for meaningful work. *Hum Resour Dev Int*. 2003 Mar 1;6(1):69–83.
10. Grant-Vallone EJ, Ensher EA. Opting In Between: Strategies Used by Professional Women With Children to Balance Work and Family. *J Career Dev*. 2011 Aug 1;38(4):331–48.
11. Weis M. Work-life balance: The working mother's struggle to balance home life and professional life after maternity leave. Alberta, Canada; 2015.
12. Mann MB, Thornburg KR. Guilt of working women with infants and toddlers in day care. *Early Child Dev Care*. 1987 Jan;27(3):451–64.
13. Cuddy AJC, Wolf EB. Prescriptions and Punishments for Working Moms: How Race and Work Status Affect Judgments of Mothers. In: Ely R, Cuddy AJC, editors. *Gender & Work: Challenging Conventional Wisdom* [Internet]. Harvard Business School; 2013 [cited 2021 Jul 28]. p. 35–42. Available from: <https://www.hbs.edu/faculty/Shared%20Documents/conferences/2013-w50-research-symposium/cuddy.pdf>
14. Adhikari DH. Anxiety and Depression : Comparative Study Between Working and Non-Working Mothers. *Glob J Hum Soc Sci*. 2012;12(12):9.
15. Quint T. 50% of New Mothers Leave Their Jobs, and Only 27% Return: Report [Internet]. *TheQuint*. 2018 [cited 2021 Jul 28]. Available from: <https://www.thequint.com/news/india/working-mothers-in-india-report-ashoka-university>
16. Arvidsdotter T, Marklund B, Kylén S, Taft C, Ekman I. Understanding persons with psychological distress in primary health care. *Scand J Caring Sci*. 2016 Dec;30(4):687–94.
17. Bhagat om. Yogic Concepts of Holistic Health and Wellness. *J Adv Res Ayurveda Yoga Unani Sidhha Homeopathy*. 2018 Jul 2;05:15–8.
18. Michalsen A, Jaitler M, Brunnhuber S, Lüdtker R, Büssing A, Musial F, et al. Iyengar yoga for distressed women: a 3-armed randomized controlled trial. *Evid-Based Complement Altern Med ECAM*. 2012; 2012.
19. de Manincor M, Bensoussan A, Smith CA, Barr K, Schweickle M, Donoghoe LL, et al. Individualized Yoga for Reducing Depression and Anxiety, and Improving Well-being: A Randomized Controlled Trial. *Depress Anxiety*. 2016 Sep;33(9):816–28.
20. Shohani M, Badfar G, Nasirkandy MP, Kaikhavani S, Rahmati S, Modmeli Y, et al. The Effect of Yoga on Stress, Anxiety, and Depression in Women. *Int J Prev Med*. 2018;9:21.
21. Deuskar M. Stress Reduction Through Yoga Nidra. In: Nikić Pk, Editor. *Proceedings of The International Interdisciplinary Scientific Conference "Yoga In Science – Future and Perspectives"* [Internet]. Belgrade, Serbia: Yoga Federation of Serbia; 2010 [cited 2021 Mar 20]. p. 72–80. Available from: <https://yoga-sci.eu/wp-content/uploads/2014/08/Proceedings-YOGA-THE-LIGHT-OF-MICROUNIVERSE-Yoga-Federation-of-Serbia-2010.pdf#page=72>
22. Bridges KA, Madlem MS. Yoga, Physical Education, and Self-Esteem. *Californian J Health Promot*. 2007 Jun 1;5(2):13–7.
23. Janjhua Y, Chaudhary R, Sharma N, Kumar K. A study on effect of yoga on emotional regulation, self-esteem, and feelings of adolescents. *J Fam Med Prim Care*. 2020;9(7):3381.
24. Dol KS. Effects of a yoga nidra on the life stress and self-esteem in university students. *Complement Ther Clin Pract*. 2019 May;35: 232–6.
25. Junkin SE. Yoga and Self-Esteem: Exploring Change in Middle-Aged Women [Internet]. Saskatoon, Canada; 2007. Available from: <https://core.ac.uk/download/pdf/226161728.pdf>
26. Golec de Zavala A, Lantos D, Bowden D. Yoga Poses Increase Subjective Energy and State Self-Esteem in Comparison to 'Power Poses.' *Front Psychol* [Internet]. 2017 [cited 2021 Mar 20];8. Available from: <https://www.frontiersin.org/articles/10.3389/fpsyg.2017.00752/full>
27. Stephens I. Medical Yoga Therapy. *Children*. 2017 Feb 10;4(2):12.
28. Rani RU, Bhuvanawari K. An Analysis on the Main Factors of Occupational Stress among Indian Women – A Soft Computing Approach. *Int J Comput Intell Inform*. 2014;4(2):8.
29. Haslam D, Finch J. The Guilt About Parenting Scale (GAPS). Parenting and Family Support Centre, The University of Queensland, Australia; 2016.
30. Haslam D, Filus A, Finch J. The Guilt about Parenting Scale (GAPS): Development and Initial Validation of a Self-Report Measure of Parenting Guilt, and the Relationship between Parenting Guilt and Work and Family Variables. *J Child Fam Stud*. 2020 Mar;29(3):880–94.
31. Lovibond SH, Lovibond PF. *Manual for the depression anxiety stress scales*. 2nd ed. Sydney, N.S.W.: Psychology Foundation of Australia; 1995.
32. Kessler RC, Barker PR, Colpe LJ, Epstein JF, Gfroerer JC, Hiripi E, et al. Screening for serious mental illness in the general population. *Arch Gen Psychiatry*. 2003 Feb;60(2):184–9.
33. Rosenberg M. *Society and the Adolescent Self-Image*. Princeton, NJ: Princeton University Press; 1965. 339 p.
34. Ponte SB, Lino C, Tavares B, Amaral B, Bettencourt AL, Nunes T, et al. Yoga in primary health care: A quasi-experimental study to access the effects on quality of life and psychological distress. *Complement Ther Clin Pract*. 2019 Feb;34:1–7.
35. Kinser PA, Goehler L, Taylor AG. How Might Yoga Help Depression? A Neurobiological Perspective. *Explore N Y N*. 2012 Mar 1;8(2):118–26.
36. Gard T, Noggle JJ, Park CL, Vago DR, Wilson A. Potential self-regulatory mechanisms of yoga for psychological health. *Front Hum Neurosci*. 2014 Sep 30;8:770.
37. Streeter CC, Jensen JE, Perlmutter RM, Cabral HJ, Tian H, Terhune DB, et al. Yoga Asana sessions increase brain GABA levels: a pilot study. *J Altern Complement Med N Y N*. 2007 May;13(4):419–26.
38. Schmalzl L, Powers C, Henje Blom E. Neurophysiological and neurocognitive mechanisms underlying the effects of yoga-based practices: towards a comprehensive theoretical framework. *Front Hum Neurosci*. 2015;9:235.