Cognitive Behaviour Therapy for Enhancing Sleep Quality and Work Life Balance among Women Entrepreneurs

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Entrepreneurship is a significant component in improving economic structure of a nation. In the recent years, a positive hike is visible in the number of women entrepreneurs throughout the world. According to the statistics, women entrepreneur's makes up approximately one-third of all global entrepreneurs. The rise of women entrepreneurship in the 21st century benefits both women and the society. Although the importance of women entrepreneurship is accepted worldwide, there is a little attention in addressing their issues. Early screening of the mental health of women entrepreneurs helps them to encounter the stressors in their daily business. Therefore, this study throws light on efficacy of cognitive behaviour therapy in enhancing sleep quality and work-life balance of women entrepreneurs. Thirty seven participants were selected using random sampling method. The tools Pittsburgh Sleep Quality Index (PSQI) and Hayman's Work-life Balance (WLB) were used to collect the data. The results revealed that the cognitive behaviour therapy is effective in enhancing sleep quality and work-life balance among women entrepreneurs. The present study provides evidence that cognitive behaviour therapy helps in betterment of the lives of women entrepreneurs.

Keywords: Sleep Quality, Work Life Balance, Cognitive Behaviour Therapy and Women Entrepreneurs.

Women are emerging as the driving force in the growth of developing economies around the world. By the accelerated pace of urbanization and modernization in many developing countries, along with the female education, women are getting more liberty for their rights and privileges and the societal attitude towards the traditional and stereotyped role of women is changing gradually. "Entrepreneurship among women vibrant and growing internationally," noted Julie Weeks. Women are flourishing in designing, beauty and cosmetic industries; as garment manufacturers and exporters; as interior decorators and publishers and still exploring new ventures of economic participation. The growth of women entrepreneurship is one of the most significant contributions to the economic and social development of a nation.

Women owned micro enterprises have begun to attract much attention in the developing world. In greater numbers than ever before, women are stepping away from the role of employees and venturing out to start their own businesses thus emerging as entrepreneurs. A positive hike is visible in the number of women entrepreneurs of both urban and rural areas due to the rising interest of women and the extensive government support and Self-Help groups. According to Indian statistics, women make up 20% in 63 million enterprises which employing 22 to 27 million people (MIWE, 2021). As per survey by Forbes, women comprise 14% of the total entrepreneurs in India and about 58% of the women entrepreneurs were in the age range of 20-30 when they started out.

The role of an entrepreneur is highly demanding as it involves starting and running an independent organization by planning and acting in terms of both present and future. (Silva and Gish, 2022). However, as there is always a flip side to a coin, in comparison with the male counterparts, women entrepreneurs often have different demands and perspectives as they are newer to the business domains. Although majority of men focus alone in developing a business, many women entrepreneurs wearing many hats all at once thus switching roles of dealing with business, domestic duties, child and family care throughout the day. The dual role of both entrepreneur and homemaker leads to overwork which results in poor sleep quality among women entrepreneurs.

The restorative theory of sleep proposed by Oswald (1966) states that the function of sleep helps in repairing and restoring the physiological mechanisms of the body are adequate for biological functioning which gets depleted in the wakeful day(Brinkman et al. 2023). Working very long hours in nights and extending work in weekends, thinking it leads to more success is a typical entrepreneurial problem. Previous research studies suggested that deep sleep affixes brief information which encodes and integrates them into long term memory (Walker and Gold, 2006) forming novel associations using different pieces of information thus results in better creativity (Cai et al.2009 and Wagner et al. 2004). By disparity, poor sleep hinders the performance of working memory on critical and analytical areas (Schmidt et al. 2015). Not getting enough sleep is also a risk factor for burnout (Soderstorm, 2012). The importance of sleep has not received notable attention among entrepreneurship fields as little fluctuations in sleep quality have profound effect on functional capabilities to operate at her innovative best. Considered together, these studies recommends that good sleep facilitates

emotional regulation, regulates body's natural rhythms, promoting social skills and enhancing creativity & innovative thinking which are crucial for women entrepreneurs to thrive in the competitive business environment. By rejuvenating sleep, women entrepreneurs can unlock their full potential by improving cognitive functions and physical stamina thus experiencing a profound shift from burnout to brilliance which helps them to stay on a track.

Balancing between work and life is the cornerstone of running a successful business for women entrepreneurs. In this 21st century, women notice it tough to have work-life balance (Abdulraheem, 2014). As stated by Parasuraman et al. (1996) "Women entrepreneurs devote significantly more time to family than men". As business is assimilated within the journey of women entrepreneurs, they tend to view their business and personal lives as mutually linked ones than as separate platforms (Kuranga, 2020). Women typically performing nurturing role in home and switching roles in business often implies large burden on them. The conflict situation arises when both the demands of family and increased commitment at business met simultaneously. Therefore, finding balance among work responsibilities and other life obligations can be challenging for women entrepreneurs (Forson, 2013). Appropriate balance can help the women entrepreneurs to set apart time to their family surroundings, health and leisure activities which provide satisfaction to themselves (Neha, 2018). Due to industrial advancements and new innovations in the modern world, in order to enhance performance in business, the women entrepreneurs spend long hours at work and carry work to home which create imbalance and enormous pressure in their lives. This results in disequilibrium among personal and professional life of them. Jeffrey et al. (2003) suggested that an equivalent time in family and taking part in work would reduce the respective conflict issues and stress thereby enhancing an individual quality of life.

Previous studies have highlighted the need for interventions in enhancing the sleep quality and work-life balance of women entrepreneurs. Cognitive Behaviour Therapy (CBT) is structured, empirical, time sensitive and goal oriented form of psychotherapy that uses practical self-help strategies. The key principle of Cognitive Behaviour Therapy is that our thoughts influence our emotions which in turn influence our behaviours. Techniques like journaling, sleep hygiene, activity scheduling, stimulus control, assertiveness training, sleep restriction, relaxation techniques. successive approximation and relapse prevention was given to the population. In this therapy, women can speak of emotions such as being entrepreneurs, creating a business mindset, transition from employee to entrepreneur, balancing family life, relationships, parenting, fitness, chronic illness and so much more.

Objectives

- To assess the level of sleep quality and work-life balance of women entrepreneurs
- 2. To explore the relationship between sleep quality and work-life balance among women entrepreneurs
- 3. To find out the efficacy of cognitive behaviour therapy in enhancing sleep quality and work-life balance among women entrepreneurs

Hypotheses

- There will be a significant relationship between sleep quality and work-life balance among women entrepreneurs
- II. There will be a significant difference between before after and follow up phases in sleep quality among women

- entrepreneurs after cognitive behaviour therapy
- III. There will be a significant difference between before after and follow up phases in work-life balance among women entrepreneurs after cognitive behaviour therapy

Method

Sample

The sample size is 37 and age of the participants' ranges from 27 to 53 years. The sample selection based on inclusion and exclusion criteria.

Inclusion criteria

- Micro Entrepreneurs who operates a small business
- Both Urban and Rural Women were included
- Women consented to participate on a voluntary basis

Exclusion criteria

- Women having less than one year of experience in business
- Women not complying with the inclusion criteria

Tools

Sleep Quality – Pittsburgh Sleep Quality Index (PSQI, 1989) by Buysee measures sleep quality and disturbances in one month. The responses rated on a 4 point Likert scale. It includes domains of subjective sleep quality, sleep latency, sleep duration, sleep efficiency, sleep disturbances, use of sleep medication and daytime dysfunction. The overall scores range from 0 to 21 and the scores above 5 indicates that an individual has significant sleep disturbances. This scale has good reliability and validity with Cronbach's alpha of 0.87 and Correlation coefficient of 0.85

Work Life Balance – Hayman version of Work Life Balance Scale (2005) consists of 15 items on a 5 point Likert scale measures three constructs namely: Work Interference with Personal Life (WIPL); Personal Life Interference with Work (PLIW) and Work and Personal Life Enhancement (WPLE). Higher scores indicate higher perceived work-life balance. The scale possesses good validity and reliability with psychometric properties.

Procedure

Participants were selected through Random Sampling method in Avinashi taluk, Tirupur, Tamilnadu. The tools Pittsburgh Sleep Quality Index (PSQI, 1989) and Hayman's Work Life Balance (WLB, 2005) were used to collect the data. Thirty seven women entrepreneurs consented to participate in the sessions. Ten sessions of Cognitive Behaviour Therapy was administered to the participants on alternative days for 90 minutes. The session includes Cognitive Restructuring, Journaling, Sleep Hygiene (Sleep restriction, Stimulus control, Keeping a Sleep Diary) Activity Scheduling, Successive Approximation and Relaxation Techniques.

Results

Table 1. Demographic data of the Women Entrepreneurs

Variables	Category	N	Percent (%)
Area	Urban	25	68
	Rural	12	32
Type of	Beauty clinics	9	24
Business	Mehandi artist	8	22
	Garments	7	19
	Cloth designer	5	14
	Education	3	8
	Travel blogger	1	3
	Cakes	2	5
	Boutique	2	5

Years of	1-3 years	11	29
Experience	4-6 years	17	45
	7-10 years	9	24

Percentages are rounded off

Table 1 shows the demographic data of the women entrepreneurs. This shows that women entrepreneurs are running different types of enterprises such as Beauty sections, Garments, Education, Hospitality and Digital sectors. Nearly 68% are from urban and 32% are from rural background.

Table 2.Correlation between Sleep Quality and Work Life balance among Women Entrepreneurs (N=37)

			Work Life Balance
Sleep Quality	Pearson Correlation	1	0.39*
	Sig. (2-tailed)		0.02
Work Life	Pearson Correlation	0.39*	1
Balance	Sig. (2-tailed)	0.02	

^{*.} Correlation is significant at the 0.05 level (2-tailed).

The correlation depicted in Table 2 shows that there is a positive correlation between Sleep Quality and Work Life Balance of Women Entrepreneurs which is statistically significant at 0.01 level which implies that having control over sleep quality allows them to better balance their work responsibilities. Getting quality sleep regularize their circadian rhythms which allows them not only to achieve work-life balance but also helps in getting personal income, securing identity and social status thereby giving structure and purpose to their lives. This indicates that having a good sleep helps the women entrepreneurs to achieve work-life balance. Hence the hypothesis, "There will be a significant relationship between sleep quality and work-life balance among women entrepreneurs" is accepted.

Table 3.Mean,	Standard deviation	Mean d	difference	and (Cohen's	d of	Sleep	Quality	and
Work Life Bala	ance among Women	Entrepre	eneurs (N=	=37)					

Variable	Group	N	Mean	S.D	Mean Difference	t	Cohen'sd
Sleep Quality	Pre test	37	4.03	1.92	7.46	14.45**	3.04
	Post test	37	11.49	2.88			
Work Life Balance	Pre test	37	30.08	8.21	28.59	20.36**	8.86
	Post test	37	58.68	11.85			

^{**.}Significant at 0.01 level (2 tailed)

Table 3 indicates that the pre-test and post-test of sleep quality have obtained mean scores 4.03 and 11.49 respectively. When comparing with the mean scores, pretest has lower sleep quality than post-test and the 't' value of is 14.45. Thus, there is a significant difference in sleep quality among pre-test and post-test of women entrepreneurs. The mean scores of pre-test and post-test in work-life balance are 30.08 and 58.68 respectively. It indicates that the post-test have higher work-life balance than pre-test with 't' value of 20.36. This indicates that cognitive behaviour therapy is effective in enhancing sleep quality and work life balance which is essential for running a successful business among women entrepreneurs. Techniques like Relaxation exercises, Activity scheduling and Assertive training were highly helpful in achieving desired results of the therapy. Cohen's d shows that there is a standardised difference among pre and post tests which shows that cognitive behaviour therapy is found to be effective in enhancing sleep quality and work-life balance among women entrepreneurs

Discussion

The purpose of the study is analyzing the effectiveness of cognitive behaviour therapy in enhancing sleep quality and work-life balance among women entrepreneurs of Avinashi Taluk, Tirupur district, Tamilnadu. A result of this research indicates that cognitive

behaviour therapy is useful in enhancing sleep quality and work-life balance and there is a positive correlation between sleep quality and work-life balance of women entrepreneurs. The results are in accordance with the study of group-based cognitive behavioural therapy (CBT) training improves mental health of entrepreneurs (Saraf et.al. 2018) where the results predicted that the group of entrepreneurs underwent treatment showed statistically significant reduction in the prevalence and intensity of depression and anxiety symptoms with higher levels of well-being in comparison with the control group. High quality sleep enhances better performance of entrepreneurs and encodes temporary information and experiences into long term memory which makes them efficient to make associations using different knowledge and decisions (Silva and Gish, 2022). Another study found that complexity in concentrating in business due to dependent care issues and not having close attachment with the relatives and friends are major reasons of having lack of work-life balance among women entrepreneurs (Mini and Sebastian, 2019). Not having adequate sleep is also a risk factor for exhaustion (Soderstorm, 2012). Thus, getting enough sleep supports higher order thinking that leads to entrepreneurial success. Regular physical exercise, spending time in a natural setting, practicing mindfulness, taking small breaks during the day are all facilitates the sleep quality which in turn restores energy

and attention in the professional lives of women entrepreneurs.

Limitations

- Restricted to one region of Tirupur, Tamilnadu and the responses may vary in other regions
- The study did not account leisure activities of women entrepreneurs as it may contribute to their well-being

Suggestions

- Interventions may include holistic approach which includes physical emotional and social components can met the multifaceted need of women entrepreneurs
- Government and voluntary organisations can provide liberal assistance for the enhancement of their business status where most of the women entrepreneurs communicated financial problems during the study.

Implications

To our knowledge, limited community based studies and interventions have conducted in India to understand the problem of women entrepreneurs. Many of the participants are not aware of their poor sleep quality and work life balance until screening. Therefore, this study has been expanded to diversified samples and exploring other possible factors for the better assistance and development of targeted interventions for women entrepreneurs.

Conclusion

The current study is based on the Theory of Planned Behaviour (Ajzen, 1991) which links beliefs and behaviours. This research work contributes theoretical knowledge regarding sleep quality and work-life balance of women entrepreneurs and it would benefit national entrepreneurial education. Also, it provides a practical implication that helps to

understand the stressors in the lives of women entrepreneurs and pave ways to encounter them. Cognitive Behaviour Therapy improves sleep quality and work-life balance of women entrepreneurs by addressing and changing their unhealthy thought patterns and behaviours. By taking care of the well-being of women entrepreneurs, they are better able to assist others and being more productive, creative and successful people thus improving the economic structure of the country.

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