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Environmental and Well-being consequences of Poor Work-life Balance Among Women IT Professionals: An Empirical study

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Abstract:
In modern lightning-fast, technologically advanced workplace, work-life balance is now a days a significant challenge for female Technologists. Extended work hours, digital overload, and the pressure to meet organizational expectations make it harder to preserve a good balance between family life, professional obligations, and environmental awareness. In addition to having an impact on one's mental, physical, and social health, a poor work-life balance also encourages environmentally unsustainable behaviors like a decline in eco-friendly activity. The aim of this empirical study is to inspect how Bengaluru's Women IT employees' poor work-life balance affects their health and the environment. A structured questionnaire was used to gather information from 136 respondents. Five major categories were used to rank the 14 consequences that were identified using the Garrett Ranking Technique: Mental Well-being, Physical Well-being, Professional Well-being, Social and Environmental consequences.

Keywords: *Work-life balance, Environmental consequences, Well-being Consequences, Women IT Professionals, Garrett Ranking technique, Sustainable behavior.*

1. INTRODUCTION:

A key development in the evolution of contemporary work is Work-Life balance, especially for women IT professionals, who are usually faced with the challenge of balancing work-related roles with family responsibilities. In the current, competitive, technology-dependent workplace, maintaining balance among personal wellness, professional responsibilities and environmental awareness is much more challenging. There are many negative consequences that result from the work-life imbalance: stress, physical fatigue, career dissatisfaction, and lower involvement in the development of a sustainable lifestyle. Women, particularly those in IT, are worst hit by a double tax of work and domestic duties.The digital aspect of IT work exacerbates these issues with extended time in front of a screen, a sedentary consumption, and digital fatigue. The core aim of work-life balance is to enhance the maximum well-being of workers and also for them to excel and to reduce wastage of resources. With balance, job satisfaction, clear thinking and sustainable living are strengthened — benefiting individuals and families, organizations and the greater community. But whenever individuals are unable to maintain the balance - from here on they suffer from emotional burnout, health problems, lack of attention to the relationship and they tend to ignore sustainable habits. This research examines the environmental and well-being outcomes of women IT professionals reporting poor W/L balance, thereby providing evidence to inform organizational interventions and policy recommendations.

2. LITERATURE REVIEW:

The table below provides a summary of key findings on work-life balance, Consequences, challenges, Garrett ranking method etc. that contribute to understanding theconsequences of poor work-life balance in women IT professionals:

Author's	year	Title of the article	Key findings

'Agha'.K	'2017'	job satisfaction & Work-life balance: An empirical investigation concentrating on Omani higher education instructors.	Emphasized how lacking work-life balance among Omani instructors causes burnout
'Balaji.R.'	'2014'	Work-life balance : Women Professionals	Emphasized the assistance of organizations while identifying the difficulties women experience in juggling their personal and career lives.
'Balamurugan'G.'., &'Sreeleka.M'.	'2020'	Research on the balance of work and life of female employees in IT	Found that long work hours and rigid schedules negatively impact women's work-life balance in the IT sector.
'Deshmukh. K'	'2018'	Analyzing Work-Life equilibrium of female employees	Explored the psychological stress experienced by working women due to imbalanced work-life scenarios.
'Khan. M. A'& 'Afzal, A'	'2018'	Application of Garrett's ranking technique to assess farmers' preferences in agricultural marketing	Showcased the utility of Garrett's ranking technique to evaluate decision-making in agricultural marketing preferences.
'Kumar, S'&'Mukherjee, A'	'2018'	The effects of stress and burnout on work-life balance in IT professionals	Demonstrated how stress and burnout reduce job performance and increase attrition rates among IT professionals.

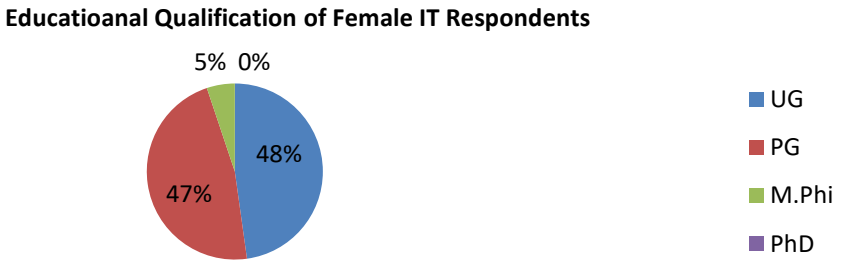
3. Objectives:

- To identify and examine the Environmental & Well-being consequences of poor Work-Life balance among Women IT Professionals in Bengaluru.
- To rank the Environmental and Well-being Consequences experienced by Women IT Professionals due to poor Work-Life Balance, using Garrett Ranking method.

4. Data Analysis & Interpretation:

➢ **Qualifications of Women IT Personnel Respondents:**

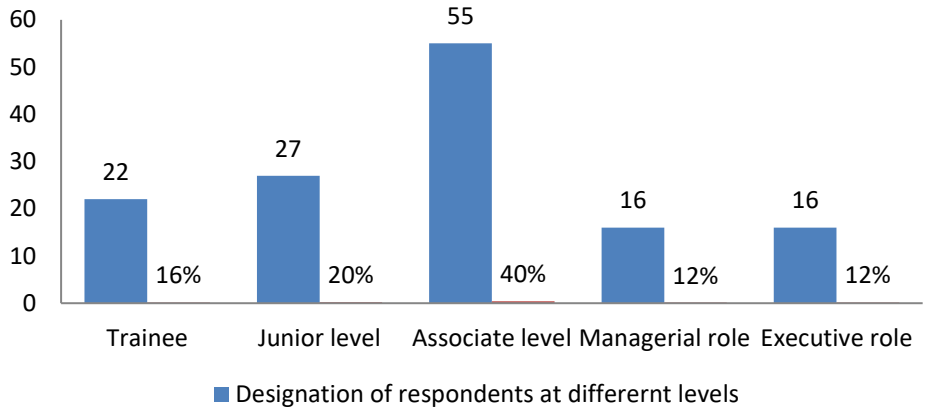
The Educational backgrounds of the Female IT Respondents are displayed in the following table:



The sample group's respondents' educational backgrounds are shown in the pie chart. Bachelor's degree holders make up the biggest percentage (48%), closely followed by Master's degree holders (47%). Only 5% of respondents have a M.Philand noone completed PhD.

➢ **Designation of Women Respondents of IT Sector:**

The Designation level of the responders is shown in the following table:



The number of respondents by designation is displayed in the chart. Associate level respondents make up the majority (40 percent, 55 people), followed by junior level respondents (20 percent, 27 people) and trainees (16 percent, 22 people). Each of the executive and managerial positions has 12% (16 employees).

Consequences of inadequate work-life balance for female IT Personnel:

➢ The following are some of the consequences of inadequate work-life balance among women IT Professionals negatively, these are categorizedas follows:

Table No 3 –Categorization of Environmental and Well-being Consequences of Poor Work-Life Balance:Female IT Professionals		
S. No	**Category**	**Consequences**
1	**Mental & Emotional Wellbeing**	Stress & Anxiety
		Depression
		Burnout
		Sleep Disorders
2	**Physical Well-being**	Obesity
		Hormonal Imbalances
		Gastrointestinal issues
		Increased Digital Fatigue
		Extended screen time & Sedentary habits
3	**Professional Well-being**	Reduced Productivity
		Career Stagnation
		Reduced Job Satisfaction
		Workplace Conflicts
4	**Social Well-being**	Strained Personal Relationships
		Decreased Participation in Sustainable Practices
		Increased Digital Fatigue
		Extended Screen Time & Sedentary Habits

5	**Environmental Consequences**	Decreased participation in sustainable practices

➢ **Application of Garrett's ranking technique:**

The Garrett ranking technique is a method used for ranking factors based on their importance, typically derived from survey data. The technique involves converting the ranks assigned by respondents into scores using a specific formula, allowing researchers to prioritize the factors in order of significance (Garrett, 1981). In this research article, Garrett ranking technique is used to rank the various consequences of poor work-life balance among women IT professionals, thiscanbe done with the following formula:

Position as a percentage = 100(Rij-0.5)/ Nj

Where Rij= Rank provided by j^{th} respondents for the i^{th} variable

Nj = Number of factors that j respondents ranked.

By consulting the table provided by Garret and Woodworth (1969), the % position estimated is transformed into scores with the use of Garrett's Table. Everyone's scores are then tallied up for each consequence, and the sum of the scores as well as the mean scores is determined. The most significant factor is the consequences with the highest mean value.

➢ **Ranking of the above consequences by the respondents:**

Based on their own personal observations, the respondents—who are female IT workers employed by different IT companies in Bengaluru city—ranked the numerous adverse consequences in the following table.

Table No:5 – Respondents ranking the Environmental & Well-being Consequences

S.No	Consequences	Frequencies of Ranks assigned by Respondents for each consequence													
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
1	Stress & Anxiety	68	9	8	10	10	8	5	5	3	2	2	2	2	2
2	Hormonal Imbalances	13	9	9	9	6	6	7	7	11	22	22	2	6	7
3	Burnout	38	9	13	12	8	12	9	8	7	9	5	2	2	2
4	Strained Personal Relationships	14	11	11	8	10	9	11	5	12	11	12	7	7	8
5	Sleep Disorders	67	15	6	6	7	5	6	3	5	4	4	4	2	2
6	Increased Digital Fatigue	69	9	7	6	5	5	7	5	3	4	3	4	5	4
7	Reduced Job Satisfaction	48	13	13	16	3	8	7	8	11	2	2	2	2	1
8	Obesity	62	5	8	6	12	6	6	12	6	4	3	2	2	2
9	Extended Screen Time & Sedentary Habits	42	15	16	13	4	8	9	10	5	6	2	2	2	2
10	Reduced Productivity	21	13	23	18	23	6	9	8	4	4	2	2	2	1

11	**Decreased Participation in Sustainable Practices**	23	12	6	6	5	5	5	5	4	7	6	10	3	39
12	**Depression**	41	9	30	13	13	6	5	5	4	2	2	2	2	2
13	**Workplace Conflicts**	34	25	11	5	9	7	5	8	9	5	10	4	2	2
14	**Career Stagnation**	28	22	12	11	13	12	7	8	6	5	4	4	2	2

- **Garrett value calculation:**

Thefollowing table indicates the calculated value and Garrett value of the above consequences, ranked by the respondents, calculated by using the formula:

Table No 6 : Calculation of Garrett Value for the Ranks			
S.No	**100(RIJ-0.5)/Nj**	**Calculated Value**	**Garrett Value**
1	100(1-0.5)/14	87.50	119.00
2	100(2-0.5)/14	83.33	113.33
3	100(3-0.5)/14	79.17	107.77
4	100(4-0.5)/14	75.00	102.00
5	100(5-0.5)/14	70.83	96.38
6	100(6-0.5)/14	66.67	90.67
7	100(7-0.5)/14	62.50	85.00
8	100(8-0.5)/14	58.33	79.33
9	100(9-0.5)/14	54.17	73.67
10	100(10-0.5)/14	50.00	68.00
11	100(11-0.5)/14	45.83	62.33
12	100(12-0.5)/14	41.67	56.67
13	100(13-0.5)/14	37.50	51.00
14	100(14-0.5)/14	33.33	45.33

- **Ranking by using Garrett ranking method:**

The following table shows the ranking of consequences, Garrett score is calculated for each rank of every consequence by multiplying the no of respondents ranked with Garrett value, Mean is calculated by dividing Total Garrett score with no.of consequences, based on the mean value of all the consequences ranks are given:

Table No 7: Ranking the consequences based on GarrettMean Score																		
S.No	**Consequences**	**Garrett scores based on Respondents' Ranking**														**Total**	**Mean**	**Rank**
		1st	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	**9th**	**10th**	**11th**	**12th**	**13th**	**14th**			

1	Stress & Anxiety	8092.00	1,547.00	1,019.97	862.16	1,020.00	963.80	725.36	425.00	396.65	221.01	136.00	124.66	113.34	102.00	90.66	**1**
2	Hormonal Imbalances	1,547.00	1,019.97	969.93	918.00	578.28	544.02	306.00	317.31	11,141.7	795.84	**13**					
3	Burnout	4,522.00	1,019.97	1,401.01	1,224.00	771.04	1,088.04	102.00	90.66	13,171.0	940.79	**11**					
4	Strained Personal Relationships	1,666.00	1,246.63	1,185.47	816.00	963.80	816.03	357.00	362.64	11,521.9	822.99	**12**					
5	Sleep Disorders	7,973.00	1,699.95	646.62	612.00	674.66	453.35	102.00	90.66	14,116.5	1,008.33	**2**					
6	Increased Digital Fatigue	8,211.00	1,019.97	754.39	612.00	481.90	453.35	255.00	181.32	13,867.2	990.52	**4**					
7	Reduced Job Satisfaction	5,712.00	1,473.29	1,401.01	1,632.00	289.14	725.36	102.00	45.33	13,794.1	985.30	**5**					
8	Obesity	7,378.00	566.65	862.16	612.00	1,156.56	544.02	102.00	90.66	13,788.36	984.88	**6**					
9	Extended Screen Time & Sedentary Habits	4,998.00	1,699.95	1,724.32	1,326.00	385.52	725.36	102.00	90.66	13,624.4	973.18	**7**					
10	Reduced Productivity	2,499.00	1,473.29	2,478.71	1,836.00	2,216.74	544.02	102.00	45.33	13,399.4	957.10	**8**					
11	Decreased Participation in Sustainable Practices	2,737.00	1,359.96	646.62	612.00	481.90	453.35	425.00	396.65	294.68	136.00	124.66	113.34	102.00	90.66	13,938.0	995.57	767.48	**14**
12	Depression	4,879.00	1,019.97	3,233.10	1,326.00	1,252.94	544.02	425.00	396.65	294.68	136.00	124.66	113.34	102.00	90.66	13,938.0	995.57	**3**	

13	Workplace Conflicts	4,046.00	2,833.25	1,185.47	510.00	867.42	634.69	425.00	634.64	663.03	340.00	623.30	226.68	102.00	90.66	13,182.1	941.58	10
14	Career Stagnation	3,332.00	2,493.26	1,293.24	1,122.00	1,252.94	1,088.04	595.00	634.64	442.02	340.00	249.32	226.68	102.00	90.66	13,261.8	947.27	9

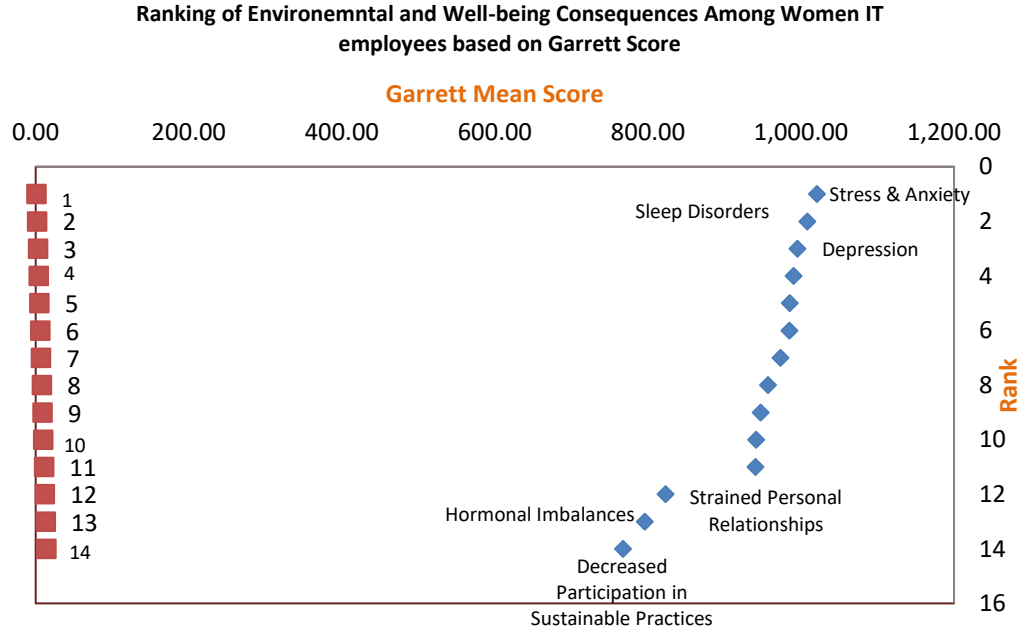


Table 7 and the corresponding chart show how the different outcomes were ranked using the Garrett Mean Score, which represents the average severity that respondents assigned to each consequence. The table shows the weighted scores for each rank (from 1st to 14th), the total score for each consequence, and the Garrett Mean Score that was used to calculate the final rank.

The main issues that women IT professionals confront in terms of their health and the environment are stress and anxiety, sleep issues, depression, and increased digital fatigue..However, in comparison to the difficulties at the top of the list, loss of self-identity was ranked 12th, depression 13th, and career stagnation 14th, indicating a comparatively smaller perceived impact.

5. CONCLUSION:

Through the analysis of data obtained from 136 respondents, the article examines the various consequences of women IT professionals on the environment and the employee well-being. The study ranked 14 identified consequences in accordance to their impact level using Garrett's ranking technique. With a mean score of 1020.90 and a total score of 14292.61, Stress & Anxiety was ranked as the most significant consequence based on the Garrett scores. sleep disorders, depression, and increased digital fatigue came next. This article demonstrated a growing significance of environmental awareness and digital well-being in the lives of women IT professionals.The findings indicate that mental and physical well-being challenges continue to dominate, while environmental and professional consequences are emerging concerns. These

insights can help organizations, policymakers, and researchers design targeted interventions to support work-life balance and overall wellness among women in the IT sector.

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