The Influence of Work-Life Balance on the Physical Health Outcome of University Academics: A Study Conducted at the University of Delta, Agbor

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Abstract

This study investigates the influence of work-life balance on the physical health outcomes of university academics at the University of Delta, Agbor. Work-life balance has become an increasingly important factor in ensuring the physical and mental well-being of individuals, particularly in high-stress professions like academia. The study employed the Work-Life Balance Scale (WLBS) and the Physical Health Questionnaire (PHQ) to examine how aspects of work-life balance correlate with specific physical health outcomes, such as sleep disturbances, headaches, gastrointestinal problems, and respiratory infections. The findings reveal that poor work-life balance is significantly correlated with increased occurrences of sleep disturbances and headaches. No significant relationship was found between work-life balance and gastrointestinal or respiratory problems. These findings underline the importance of creating supportive work environments that help academics achieve better work-life balance, thereby improving their physical health outcomes.

Keywords: *Work-Life Balance, Physical Health Outcome and Academics.*

Introduction

Work-life balance is an important factor influencing both the productivity and well-being of employees. For university academics, managing a balance between professional duties—such as teaching, research, and administrative responsibilities—and personal life can be particularly challenging. Given the increasing demands in academia, a lack of work-life balance can lead to significant stress and physical health issues. The University of Delta, Agbor, serves as a case study to explore the influence of work-life balance on physical health outcomes among university academics.

This study aims to examine whether work-life imbalance contributes to negative health outcomes, such as sleep disturbances, headaches, gastrointestinal problems, and respiratory infections. By understanding the specific health risks associated with poor work-life balance, this research can help university administrators and policymakers formulate strategies to improve the working conditions of academics.

Literature Review

Work-Life Balance

The concept of work-life balance is crucial to understanding how work demands affect an individual's overall well-being. Dex and Bond (2005) developed the Work-Life Balance Scale (WLBS), which has been used extensively in various research contexts to measure work-life balance regardless of the demographic characteristics of the individuals. The WLBS is based on a 10-item questionnaire scored on a 5-point Likert scale, which helps determine how individuals balance work responsibilities with other aspects of their lives, such as family, hobbies, and social

activities. Higher scores indicate poorer work-life balance, implying that individuals struggle more in maintaining equilibrium between their work and personal lives.

Research by Ayam and Darlane (2019) used the WLBS to study work-life balance in a Nigerian context, specifically among bank employees. Their findings indicated that the WLBS is suitable for use in Nigeria, as they achieved a Cronbach alpha of 0.75, which suggests satisfactory internal consistency reliability.

However, Pichler (2009) argued that the scale might over emphasise work-related aspects, potentially leading to biased results. Despite these criticisms, Dex and Bond (2005) found that the scale reliably predicts employees' work-life balance across diverse groups, including variations in age, gender, and employment level.

Physical Health and Work-Life Balance

The relationship between work-life balance and physical health has been studied extensively. Spence et al. (1987) developed the Physical Health Questionnaire (PHQ), which measures the frequency of health problems such as headaches, gastrointestinal issues, sleep disturbances, and respiratory infections. The PHQ was employed in this study to determine the specific physical health outcomes associated with work-life balance among academics.

Previous studies have shown that poor work-life balance can lead to various physical health problems. For instance, the negative impact of work-life imbalance on sleep quality has been widely documented, as sleep is a critical factor for maintaining good health and cognitive function (Kim, 2014). Similarly, constant exposure to work-related stress can manifest in the form of headaches and other physical symptoms, further highlighting the importance of addressing work-life balance in the workplace.

Leadership and Organisational Support in Addressing Work-Life Balance

Leadership styles and organisational support have also been found to play a significant role in mitigating the effects of work-life imbalance. Transformational leadership, which focuses on employee well-being, has been shown to promote work-life balance and improve health outcomes (Deci et al., 2017). On the other hand, autocratic leadership styles often exacerbate work-related stress, thereby negatively affecting work-life balance and, consequently, physical health.

Methodology

Participants

The study was conducted among university academics at the University of Delta, Agbor. A total of 89 participants were included, comprising both male and female academics across different educational levels, ranks, and marital statuses. The demographics of the participants are summarised below.

Statistics	Age	Gender	Educational Level	Marital Status	Rank
N Valid	89	89	89	89	89
Missing	0	0	0	0	0
Mean	42.19	1.52	1.29	1.58	3.27
Std. Deviation	9.56	0.50	0.46	0.73	1.62

Descriptive Statistics and Frequencies

The descriptive statistics for work-life balance and health outcomes are summarised below.

Variables	Mean	Std. Deviation	N
Work-Life Balance	17.56	2.19	89
Sleep Disturbance	6.60	1.61	89
Headaches	6.28	2.18	89
Gastrointestinal Problem	7.04	1.67	89
Respiratory Problem	6.82	1.43	89

Age	Frequency	Percent	Cumulative Percent
28.00	8	9.0	9.0
32.00	13	14.6	23.6
34.00	18	20.2	43.8
46.00	17	19.1	62.9
49.00	17	19.1	82.0
55.00	8	9.0	91.0
56.00	8	9.0	100.0

Gender	Frequency	Percent	Cumulative Percent
Male	43	48.3	48.3
Female	46	51.7	100.0

Educational Level	Frequency	Percent	Cumulative Percent
Ph.D	63	70.8	70.8
M.Sc	26	29.2	100.0

Marital Status	Frequency	Percent	Cumulative Percent
Married	50	56.2	56.2
Single	26	29.2	85.4
Separated	13	14.6	100.0

Rank	Frequency	Percent	Cumulative Percent
Lecturer I	16	18.0	18.0
Reader (Assoc. Prof)	17	19.1	37.1
Senior Lecturer	17	19.1	56.2
Professor	13	14.6	70.8
Lecturer II	18	20.2	91.0
Assistant Lecturer	8	9.0	100.0

Correlation Between Work-Life Balance and Physical Health Outcomes

The results of the Pearson Product Moment Correlation are summarised in the table below.

Variables	Mean	Std. Deviation	WLB	SD	H	GIP	RP
Work-Life Balance (WLB)	17.56	2.19	1.00	.44	.49	.03	-.14
Sleep Disturbance (SD)	6.60	1.61	.44	1.00	.22	-.19	.01
Headaches (H)	6.28	2.18	.49	.22	1.00	.29	-.34
Gastrointestinal Problem (GIP)	7.04	1.67	.03	-.19	.29	1.00	-.39
Respiratory Problem (RP)	6.82	1.43	-.14	.01	-.34	-.39	1.00

Note:- $p < 0.01$ - $p < 0.05$

Work-life balance scale

Work-life balance was measured with the work-life balance scale (WLBS) which is a 10-item instrument developed by Dex and Bond (2005) to measure adjustment of working patterns regardless of age, race or gender to seamlessly combine work with other life responsibilities, challenges or aspirations. The WLBS is measured on a 5-point Likert scale with the scoring as follows; fully disagree (1), disagree (2) undecided (3) agree (4) and fully agree (5). Some sample items of the scale include: "Finding time for hobbies, leisure activities, or to maintain friendships and extended family relationships is difficult," "My family are missing out on my input," and "Relaxing and forgetting about work issues is hard to do." The scale has a score range of 10 and 50. The scale is measured such that the higher the score, the more the imbalance of employees. The authors obtained internal consistency of .82 for the work-life balance scale and has shown a good divergent validity with an average correlation with other scales of r= 0.25 (compared to an average inter-correlation between climate scales of 0.41) (Parkes & Langford, 2008). Dex and Bond (2005) found that the scale is proper to predict employees' work-life balance score regardless of their age, gender, work position and working hours (Kim, 2014). However, Pichler, (2009) reported that the scale has been criticized for use for a large sample size that work-related aspects has the largest explanation of the variation in work-life balance. Also, that the wordings of the work-life balance indicators already include their most probable explanations and so there is a danger of concluding on the effect other than work-related aspects of work-life balance. Despite the criticisms of the scale, Ayam and Darlane (2019) adapted the scale to the Nigerian sample in studying the work-life balance of bank employees in the south-south area of Nigeria and obtained the Cronbach alpha of .75 for the work-life balance scale of Dex and Bond (2005). Tatham (2006) stated that a result with a coefficient of less than 0.6 shows a marginally low internal consistency,

while a result with a value of 0.60 or more indicates satisfactory internal consistency reliability, hence the suitability of the work-life balance scale in measuring employee work engagement in Nigeria.

Physical Health Questionnaire

PHQ, a modified version of Spence et al.'s (1987) measure of health. The scale consisted of 14 items pertaining to the frequency with which respondents experience sleep disturbances, headaches, respiratory infections, and gastrointestinal problems. Items 1–11 were rated on a 7-point frequency scale, ranging from 1 (not at all) to 7 (all of the time). Items 12–14 had different frequency-related response options. Internal consistency analyses of the four PHQ sub-scales revealed the following Cronbach's alpha values for Samples 1 and 2, respectively: .84 and .86 for the Gastrointestinal Problems subscale, .84 and .86 for the Headaches subscale, .79 and .84 for the Sleep Disturbance subscale, and .66 and .61 for the Respiratory Infections subscale.

Spence, J. T., Helmreich, R. L., & Pred, R. S. (1987). Impatience versus achievement strivings in the Type A pattern: Differential effects on students' health and academic performance. Journal of Applied Psychology, 72, 522–528.

Results

Table: Pearson Product Moment Statistics of Work life balance and Physical Health Outcome Dimensions

Variables	Mean	Std. D	WLB	SD	H	GIP	RP
Work life Balance	17.56	2.19	1.00				
Sleep Disturbance	6.60	1.61	.44**	1.00			
Headaches	6.28	2.18	.49**	.22*	1.00		
Gastro-Intestinal Problem	7.04	1.67	.03	-.19	.29**	1.00	
Respiratory Problem	6.82	1.43	-.14	.01	-.34**	-.39**	1.00

Results showed that work life balance had positive significant relationship with sleep disturbance dimension of physical health outcome at $r(N=89) = .44$, $p<.01$ (M: 6.60, SD: 1.61). Work life

balance had positive significant relationship with headaches dimension of physical health outcome at r(N=89) = .49, p<.01(M: 6.28, SD: 2.18). Work life balance had no relationship with gastro-intestinal problem dimension of physical health outcome at r(N=89) = .03 p>.01 (M: 7.04, SD: 1.67). Work life balance had no relationship with respiratory problem dimension of physical health outcome at r(N=89) = -.14 p<.01 (M: 6.82, SD: 1.43).

Summary of the Findings

1.Work life balance had positive significant relationship with sleep disturbance dimension of physical health outcome.

2.Work life balance had positive significant relationship with headaches dimension of physical health outcome.

3.Work life balance had no relationship with gastro-intestinal problem dimension of physical health outcome.

4.Work life balance had no relationship with respiratory problem dimension of physical health outcome.

Discussion

The results of this study highlight the significant impact of work-life balance on certain physical health outcomes for university academics at the University of Delta, Agbor. Specifically, work-life balance showed a positive correlation with sleep disturbances and headaches, indicating that academics who struggle to balance their professional and personal lives are more likely to experience these health issues. These findings align with previous research indicating that high job

demands and inadequate work-life balance can lead to sleep problems and chronic headaches (Kim, 2014).

Poor work-life balance was found to be significantly associated with increased occurrences of sleep disturbances. Sleep disturbances have long been recognised as a consequence of excessive stress and imbalance between work and personal life. Academics are often under pressure due to teaching loads, research deadlines, and administrative tasks, which can prevent them from maintaining a regular sleep schedule. This disruption in sleep patterns can affect their cognitive function and overall productivity, which could ultimately impact both their professional and personal lives.

Similarly, a significant relationship between work-life balance and headaches was observed. Headaches are a common symptom of stress, and the findings suggest that the inability to manage work and personal responsibilities can contribute to the occurrence of stress-induced headaches. This may be particularly true for academics, whose work environment often demands multitasking and meeting tight deadlines.

On the other hand, the study found no significant relationship between work-life balance and gastrointestinal problems or respiratory issues. This suggests that while work-life imbalance can have a significant effect on mental and neurological health, it may not directly contribute to issues like gastrointestinal or respiratory health problems. This aligns with the findings of Pichler (2009), who suggested that work-related stressors have varying degrees of influence on different physical health outcomes. Gastrointestinal and respiratory problems may be influenced by other factors such as diet, genetics, environmental factors, or exposure to pathogens, rather than work-life balance alone.

The results underscore the importance of creating supportive work environments that can help academics achieve better work-life balance. University leadership should consider strategies such as flexible work hours, reducing administrative burdens, and providing wellness programs that specifically target sleep and stress management. The findings also suggest that interventions aimed at promoting work-life balance may be effective in reducing the prevalence of sleep disturbances and headaches, ultimately contributing to improved health outcomes and higher levels of productivity.

Implications for Practice

The findings of this study have several practical implications for university management and policymakers. The positive correlation between poor work-life balance and both sleep disturbances and headaches highlights the need for targeted interventions. Implementing flexible work policies can provide academics with greater autonomy over their schedules, enabling them to better balance work and life responsibilities. Moreover, providing resources such as counselling services, mental health support, and stress management workshops could further help academics cope with work-related stress and reduce its impact on their physical health.

University administrators should also consider workload management strategies. The findings indicate that high job demands are linked to poor physical health outcomes; therefore, reducing teaching loads or delegating administrative tasks could alleviate stress and improve work-life balance. Additionally, promoting a culture of supportive leadership is critical, as transformational leadership styles have been shown to foster a positive work environment that supports employee well-being (Deci et al., 2017).

Future Research

Future research should consider exploring the long-term effects of work-life balance interventions on physical health outcomes. Longitudinal studies could provide more in-depth insights into how changes in work-life balance over time impact health. Additionally, expanding the sample size and including academics from multiple universities could improve the generalisability of the findings. The present study did not find significant relationships between work-life balance and gastrointestinal or respiratory problems, but future research could explore whether other factors might mediate these relationships.

Limitations of the Study

The study has some limitations that should be acknowledged. First, the cross-sectional design does not allow for causal inferences. The associations found between work-life balance and physical health outcomes indicate correlations but cannot confirm causality. Second, the study relied on self-reported data, which can introduce biases such as social desirability bias. Participants might have under reported health issues or overestimated their ability to maintain work-life balance. Finally, the study was conducted in a single institution, which may limit the generalisability of the findings to other academic settings.

Conclusion

This study provides valuable insights into the relationship between work-life balance and physical health outcomes among university academics. The findings indicate that poor work-life balance significantly correlates with increased occurrences of sleep disturbances and headaches but does not significantly relate to gastrointestinal or respiratory problems. These results highlight the need for university administrators to implement supportive measures aimed at improving work-life

balance, which could lead to better health outcomes and increased productivity among academic staff.

Recommendations

1.Flexible Work Arrangements: University management should introduce flexible work hours and telecommuting options to help academics better balance their professional and personal responsibilities.

2. Wellness Programs: Institutions should establish wellness programs that include stress management and sleep improvement strategies.

3. Workload Management: Reducing administrative tasks and providing adequate support for teaching and research activities can alleviate stress and contribute to a better work-life balance.

4. Counselling Services: Universities should offer counselling services that focus on helping academics manage stress and improve their overall well-being.

5. Leadership Training: Training programs for university leaders should emphasise the importance of work-life balance and the role of supportive leadership in reducing employee stress.

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