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Help, I am not coping with my job! – A work-life balance strategy for the Eswatini construction industry

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Abstract

Purpose – This paper presents the findings of assessing the strategies required for improved work-life balance (WLB) of construction workers in Eswatini. This was done to improve the work-life relationship of construction workers and, in turn, improve the service delivery of the construction industry in the country.

Design/methodology/approach – The study adopted a quantitative research approach using a questionnaire administered to construction professionals in the country. The data gathered were analysed using frequency, percentage, Mann–Whitney *U* test, exploratory and confirmatory factor analysis (CFA).

Findings – The findings revealed that the level of implementation of WLB initiatives in the Eswatini construction industry is still low. Following the attaining of several model fitness, the study found that the key strategies needed for effective WLB can be classified into four significant components, namely: (1) leave, (2) health and wellness, (3) work flexibility, and; (4) days off/shared work.

Practical implications – The findings offer valuable benefits to construction participants as the adoption of the identified critical strategies can lead to the fulfilment of WLB of the construction workforce and by extension, the construction industry can benefit from better job performance.

Originality/value – This study is the first to assess the strategies needed for improved WLB of construction workers in Eswatini. Furthermore, the study offers a theoretical platform for future discourse on WLB in Eswatini, a country that has not gained significant attention in past WLB literature.

Keywords Construction workforce, Construction health and safety, Health and wellness, Work-life balance

Paper type Research paper

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Introduction

The construction industry has been characterised by poor performance in delivering projects within the agreed budget, schedule, and specification of the clients (Aghimien *et al.*, 2020; Oshodi *et al.*, 2017). Several factors, including employee-related issues, have been held accountable for these poor performances (Dlamini *et al.*, 2019). This is because the construction industry worldwide is labour intensive (Aghimien *et al.*, 2021; Shehata and El-Gohary, 2011; Song *et al.*, 2020). The industry is project-based and requires long working hours to meet deadlines. This project-based nature of the industry means that workers have to move from one site to another, travel to different workplaces, and put in extra-long hours. As a result, significant pressure is subsequently placed on construction workers, and they are exposed to issues that affect their work and family/personal life (Dlamini *et al.*, 2019; Shehata and El-Gohary, 2011). The resultant effect of this poor work-life balance (WLB) in the construction industry is evident in employees' absenteeism, low job satisfaction, turnover intention, low labour productivity, and poorly motivated workers that have characterised the industry (Lingard *et al.*, 2007; Shehata and El-Gohary, 2011; Sang *et al.*, 2009). More so, construction projects are affected by this imbalance in employees' work-life, leading to poor project delivery in the industry and poor performance of construction organisations (Dlamini *et al.*, 2019; Lingard *et al.*, 2007).

To address these employee-related issues, several studies have continued to emanate on employees' WLB (Chan *et al.*, 2020; Lingard *et al.*, 2012; Oyewobi *et al.*, 2019; Tijani *et al.*, 2020). According to Johnson (2015), WLB combines healthy practices of professional life and personal responsibilities. Individuals who accomplish a balance between their work and personal life tend to have an improved lifestyle and fulfil their employment goals by reducing pressure and despondency, which brings about great wellbeing (Bhaga, 2010). While WLB has continued to gain attention in the construction industry of most developed and developing countries, less attention has been placed on this area of research in Eswatini. A quick literature search of WLB-related publications from Eswatini in notable databases such as Scopus and ISI-web of science yielded no result. The absence of research emanating from this area requires attention, considering that the construction industry in the country has been characterised by long working hours and demographic changes (age, gender, income etc.) that require WLB initiatives (Dlamini *et al.*, 2019). Eswatini, as one of the South African Development Community (SADC) countries, is committed to gender equality practice and is a signatory of the SADC Protocol on Gender and Development to increase women's participation in industries that contribute to the countries' economy (Veritas, 2008). However, it has been noted that the emergence of women within the labour force has brought about a whole new dimension in the research for healthy WLB (Yokying *et al.*, 2016). This is because, for women, work-life differs, as after intense and long working hours at a workplace, they have the added burden of domestic and care responsibilities at home (Reddy *et al.*, 2010). Since the construction industry in Eswatini is characterised by both male and female professionals, addressing issues affecting the WLB of construction workers, in general, could help improve the lives of the individual employees, their families, and the society at large.

Based on the above knowledge, this study assessed the strategies needed for improved WLB of construction workers in Eswatini. The critical strategies needed to improve WLB were assessed to give a practical guide to construction organisations, government institutions, and professional bodies the help needed to shape their WLB policies. The study offers a theoretical platform for future discourse on WLB in Eswatini, a country that has not gained significant attention in past WLB literature.

Theoretical background

Several theories have shaped the understanding of WLB in the past. One such theory is the "spill-over" theory which suggests that both the work-life and family-life of an individual affect each other. The theory holds that both positive and negative experiences or work abilities can continue into individuals' positive or negative experiences or abilities at home and vice versa (Bello and Tanko, 2020; Khateeb, 2021). This theory is the opposite of the earlier segmentation theory, which noted that the work and home of individuals are separate entities that are segmented and are not affected by each other (Edwards and Rothband, 2000; Guest, 2002). Other theories like the compensation theory (Lambert, 1990; Mathew and Natarajan, 2014; Roy, 2016), enrichment theory (Powell and Greenhaus, 2006), instrumental theory (Evans and Bartolomé, 1984; Guest, 2002), and inter-role conflict theory (Greenhaus and Beutell, 1985) have all shown that a relationship exists between the work-life and family-life of individuals, and creating a balance between these two domains is essential. Noon *et al.* (2013) described WLB as the ability of an individual to achieve success in their work and non-work life without undue pressure from one aspect, hampering the satisfaction derived from the other. Smith *et al.* (2011) simply describe it as the ability of individuals to spend sufficient time at their job and at the same time being able to spend sufficient time in other quests such as families, hobbies and involvement in community engagements. To achieve this balance, WLB practices or strategies are essential. Lingard *et al.* (2007) described these practices as interventions designed to create a healthy balance between workers' personal life and job tasks.

In Australia and the United States of America, employers have realised that adopting the right WLB initiative can help retain good performing employees, increase the quality of work, competitive advantage, and improve organisational performance (De Cleri *et al.*, 2005; Kossek *et al.*, 2010). Therefore, to effectively manage the construction workforce to improve performance, it is important to understand the strategies needed in the work environment. Strategies such as work flexibility and compressed week have been proposed in past studies as a way of attaining WLB (Bryce *et al.*, 2019; Lingard *et al.*, 2008). Wedderburn (1996) has noted that compressed working week is a common practice among developed countries. It is a method used to cut the length of working days in a week, but increasing the length of the working hours in a day in any given cycle, and this approach has proven to be efficient in creating some balance between the work and family life of employees (Francis *et al.*, 2013; Lingard *et al.*, 2007; Wedderburn, 1996). For example, in the Netherlands, a compressed working week proved to be efficient and successful as it made it possible to reduce working hours and increase operation time (Wedderburn, 1996).

Aside from the compression of the working weeks, construction organisations need some flexibility in their working arrangement. This could include flexible work hours (flexi-time), part-time working arrangements and job sharing to enhance workers wellbeing and provide good practice for work-life equilibrium (Skinner and Pocock, 2011). Flexible work options positively affect work-life practice (Thorgeirsdóttir and Kelliher, 2016). Ensuring flexibility in employees' working time is essential to both employees' job satisfaction and organisational performance (Molleman and van den Beukel, 2007; Powell and Mainiero, 1999). Unfortunately, this concept of flexi-time is yet to be fully embraced in the construction industry because of the industry's complex nature, wherein projects are controlled by time (Burnand, 2015). Thus, the long working hours evident in the industry have been a principal culprit of work-life imbalance. More so, the failure of the industry to have regular and reasonable working hours have continued to deter the entrance of young prospective employees seeking to get hands-on experience of parenting (Lingard and Francis, 2008). To address this, part-time work can also be adopted, particularly for female employees (Albertsen *et al.*, 2008). Albertsen *et al.* (2008) noted that dual-earning couples in part-time arrangements tend to experience fewer work-family conflict incidents than those employed

full-time. Organisations can also ensure job sharing whereby the organisation policy allows two employees to share one job. This offer reduction in the number of hours that one employee is supposed to work in a week and advantageously enable the employee to have an opportunity to attend to issues in their personal life. The employer benefits productivity, as job sharing enables increased opportunities for the dual contribution of fresh ideas, knowledge, expertise, a combination of quality experience, as well as reduction in the level of absenteeism and turnover (León *et al.*, 2019). Other flexible work arrangements include telecommuting or telework, where employees can complete job tasks outside the organisation. This creates some flexibility for employees to carry out their job functions while attending to personal/family issues (Skinner and Pocock, 2011).

The demographic composition of the workforce in the construction industry has dramatically changed in recent years. The increase of women in the industry has prompted the demand for maternity/parental leave (Zheng *et al.*, 2016). In most countries, organisations are compelled by law to implement the maternity and parental leave provisions (Burgess *et al.*, 2007; Dex and Bond, 2005). However, there have been claims that some organisations often have challenges in completely meeting the legal requirements when dealing with leave options to their employees. Organisations' neglecting maternity and parental leave options run the risk of negatively affecting their employees (especially women) WLB (Burgess *et al.*, 2007). More so, Forry and Hofferth (2011) indicated the need for a childcare programme that could help working parents. This can be achieved by providing and facilitating onsite day-care centres to save female employees from the stress of finding dependable childcare outside their organisation. Zheng *et al.* (2016) also emphasised that in some organisations, they could alternatively formulate a sponsored childcare programme to support female employees. Sponsoring childcare facilities strategy can significantly impact job satisfaction, commitment to work, and reduction in employee turnover intention (Morrissey and Warner, 2011).

Career development through study leave has been proposed as an effective WLB strategy. Employees can go on study leave, as professional employees need constant training to improve job productivity and professional growth. Organisations that provide paid study leave to workers tend to benefit employee loyalty and job satisfaction (Monterde, 2015). Also, strategies to improve employees' health and wellbeing can help attain WLB within an organisation (Chan *et al.*, 2020). Meyer and Maltin (2010) stated that the key indicator of an organisation's success relies on employees' health and wellbeing. It has been observed that organisations that have implemented proper well-being programmes have created a safe and healthy working environment, thus resulting in decreased absenteeism, increased employee retention, and improved organisational productivity and job performance. This approach has helped create some WLB among employees (Baicker *et al.*, 2010; Chan *et al.*, 2020). Also, giving employees access to health insurance with family coverage can add value to WLB. Unfortunately, most employers offer such privileges to employees who occupy higher positions in their organisations (Galinsky and Bond, 1998). Based on the aforementioned, Table 1 summarises the WLB strategies assessed in this study.

Research methodology

The research follows a post-positivist philosophical stance using a quantitative research approach with a questionnaire as the instrument for data collection. This research approach has been widely embraced in past WLB studies in construction (Chan *et al.*, 2020; Dlamini *et al.*, 2019; Irfan *et al.*, 2021; Oyewobi *et al.*, 2019). The use of a questionnaire for the study was based on its ability to cover a wide range of audiences within a short period (Tan, 2011). The questionnaire was designed in two sections, with the first section harnessing the respondents' demographic characteristics. The second section sought to unearth the most critical strategies for attaining effective WLB in the Eswatini construction industry using the

Code	Strategies	Sources
WLS1	Part-time work	Albertsen *et al.* (2008), Lyonette (2015)
WLS2	Study leave	Monterde (2015)
WLS3	Flexi-time	Burnand (2015), Bryce *et al.* (2019), Lingard *et al.* (2008), Thorgeirsdóttir and Kelliher (2016)
WLS4	Work from home on an ad hoc basis	De Cieri *et al.* (2005), Lingard *et al.* (2012)
WLS5	Job share	León *et al.* (2019), Skinner and Pocock (2011)
WLS6	Rostered days off	De Cieri *et al.* (2005), Lingard *et al.* (2012)
WLS7	Paid parental leave (Care for sick dependant)	Burgess *et al.* (2007), De Cieri *et al.* (2005), Dex and Bond (2005)
WLS8	Childcare arrangements/benefits (crèche)	Bardoel *et al.* (1998), Forry and Hofferth (2011), Zheng *et al.* (2016)
WLS9	Paternity/Maternity leave	Bardoel *et al.* (1998), Burgess *et al.* (2007), Zheng *et al.* (2016)
WLS10	Sick leave	Bardoel *et al.* (1998), Dlamini *et al.* (2019)
WLS11	Telecommuting	Bardoel *et al.* (1998), De Cieri *et al.* (2005), Skinner and Pocock (2011)
WLS12	Access to health insurance with family coverage	Byrne (2005), Galinsky and Bond (1998)
WLS13	Career Break	De Cieri *et al.* (2005)
WLS14	Compressed week	Bryce *et al.* (2019), Francis *et al.* (2013), Lingard *et al.* (2008), Wedderburn (1996)
WLS15	Flexible holidays	Burnand (2015), Tempstaff (2014)
WLS16	Non-paid extra holidays	Burnand (2015), Tempstaff (2014)
WLS17	Health and wellness programme	Chan *et al.* (2020), Meyer and Maltin (2010)
WLS18	Taking annual leaves as required	Bardoel *et al.* (1998), Dlamini *et al.* (2019)
WLS19	Organisation understanding and support	Bardoel *et al.* (1998), Dlamini *et al.* (2019)
WLS20	Availability and usage of WLB policies	Bardoel *et al.* (1998), Dlamini *et al.* (2019)

Table 1.
Summary of the WLB strategies

variables in Table 1. This second section was assessed on a five-point Likert scale, with one being "not important" and five being "very important".

The designed questionnaire was distributed to registered construction professionals in Mbabane and Manzini, the two main cities in the country's four regions. The choice of selecting these cities is a result of their high concentration of construction professionals and organisations. These professionals were drawn from the council of Architects, Engineers, Surveyors and Allied Professionals (AESAP). The AESAP database revealed 137 registered professionals, which formed the study's target population. It is noteworthy to add that Eswatini has approximately 1.2 million people and a construction industry that is still growing and unstructured (Thwala and Mvubu, 2009; World Bank, 2021). Therefore, getting a high number of construction professionals as obtained in studies from other developing countries was unlikely (Aghimien *et al.*, 2019). Based on the targeted population, a census of all 137 registered professionals was conducted, and questionnaires were sent out via emails to them. A total of 90 questionnaires were retrieved, and after careful evaluation, only 75 were useable as the rest had incomplete information. The useable questionnaire represented a 54.7% response rate. This response rate was deemed adequate for the study as past construction-related studies have noted that a response rate of between 20 and 30% is adequate for a meaningful conclusion to be drawn from a questionnaire survey (Aghimien *et al.*, 2018; Akintoye, 2000).

The data gathered on the respondent's demographic characteristics were analysed using frequencies and measures of central tendencies. Forza (2002) has suggested "measures of central tendencies" as being relevant to characterise the central value of the set of

observations parsimoniously in a meaningful way. The normality of the data was tested using Shapiro–Wilk's test (*S–W*) test for normality. This test revealed that the data gathered are not normally distributed as a significant *p*-value of 0.000 was derived for all the assessed strategies. Based on the non-normality of the data derived from the *S–W* test, the Man-Whitney *U* Test (*M–W*), a non-parametric test used to ascertain the significant difference in the rating of two groups of respondents, was adopted to test the difference in the rating of male and female respondents in the study. This test became important as past studies have noted that gender plays a crucial role in the WLB of construction workers (Lingard and Lin, 2004; Tijani *et al.*, 2020).

Since the study assessed a fairly large number of variables, exploratory factor analysis (EFA) was conducted to help regroup the variables into more manageable subscales (Pallant, 2011). To conduct this test, past studies have favoured using a large sample size (above 150) (Norris and Lecavalier, 2010; Tabachnick and Fidell, 2013). However, recent studies have emerged with fewer samples using the communalities derived as a basis for justification (Paul *et al.*, 2021). It has been noted that as long as a communality of 0.5 and above is attained, researchers need not emphasise the size of the sample (Field, 2009; Preacher and MacCallum, 2002; Tabachnick and Fidell, 2013). However, communalities of 0.3 have also been favoured in past studies (Pallant, 2011). The factorability of the data gathered was also tested using Kaiser-Meyer-Olkin (KMO) and the Bartlett test of sphericity. Following the satisfaction of the preliminary checks, EFA was conducted using principal component analysis (PCA) with varimax rotation since PCA can easily identify and reduce a large set of variables into small coherent subscales (Hair *et al.*, 2006; Tabachnick and Fidell, 2013). Based on the principal components of WLB strategies derived from EFA, confirmatory factor analysis (CFA) was conducted using EQAtion (EQS) software version 6.4. This analysis was conducted to confirm the validity, applicability and fitness of the variables to improve WLB in the Eswatini construction industry.

Findings and discussion

Demographic characteristics of respondents

Table 2 gives the summary of the demographic characteristics of the respondents. The respondents sampled comprised of more male construction professionals, most of whom are either married or single, working for government, contracting or consulting organisations. These respondents comprised architects, engineers, project and construction managers, and quantity surveyors. The highest academic qualification of the respondents was a bachelor's degree with an average year of experience of 10.8 years. The majority of these have high knowledge of the concept of WLB; however, most of them work in organisations where WLB initiatives are rarely implemented.

Strategies for improved WLB in the construction industry

The result in Table 3 shows that rating of the WLB strategies along with the result from the *M–W* test conducted. The result revealed that paternity/maternity leave (WLS9), sick leave (WLS10) and annual leaves (WLS18) were rated as the top three strategies for male professionals while health and wellness programme (WLS17), that paternity/maternity leave (WLS9), and annual leaves (WLS18) were ranked top by the female professional. The result implies that the male professionals believe having time off when they have a newborn and when they are sick and on an annual basis is important for them to attain work-life equilibrium. Conversely, female professionals believe that having a good health and wellness programme along with maternity leave is germane to their WLB and annual leave. *M–W* test shows that while the two groups of professionals have a convergent view in ranking 19 of

Category	Classification	Frequency	Percentage
Gender	Male	46	61.3
	Female	27	36.0
	Prefer not to say	2	2.7
	Total	75	100.0
Marital Status	Single	30	40.0
	Married	32	42.7
	Divorced	7	9.3
	Widowed	2	2.7
	Prefer not to say	4	5.3
	Total	75	100.0
Type of organisation	Government	36	48.0
	Contracting	18	24.0
	Consulting	21	28.0
	Total	75	100.0
Professional affiliation	Architect	13	17.3
	Construction managers	13	17.3
	Engineers	24	32.0
	Project managers	14	18.7
	Quantity surveyors	11	14.7
	Total	75	100.0
Academic qualification	Ordinary national diploma	9	12.0
	Higher national diploma	12	16.0
	Bachelor's degree	48	64.0
	Master's degree	6	8.0
	Total	75	100.0
Years of experience	1–5 years	19	25.3
	6–10 years	12	16.0
	11–15 years	16	21.3
	16–20 years	22	29.3
	Above 20 years	6	8.0
	Total	75	100.0
	Average	10.8	
Knowledge of WLB	Low	10	13.3
	Average	4	5.3
	High	61	81.3
	Total	75	100.0
Implementation of WLB initiatives	Rarely	50	66.7
	Sometimes	25	33.3
	Total	75	100.0

Table 2. Demographic characteristics

these strategies, they rated health and wellness programmes differently as a significant p-value of 0.009 was derived. This implies that both groups' importance attached to this WLB initiative differs. While the female professionals rated it first, their male counterparts rated it eight. Overall, the result revealed that paternity/maternity leave ($\overline{X} = 4.56$, p-value = 0.506), sick leave ($\overline{X} = 4.49$, p-value = 0.596), annual leaves ($\overline{X} = 4.45$, p-value = 0.972), health and wellness programme ($\overline{X} = 4.37$, p-value = 0.009) and organisation understanding and support ($\overline{X} = 4.36$, p-value = 0.555) were ranked as the most important WLB strategies by both groups.

Exploratory factor analysis. For EFA to be conducted, careful consideration must be given to the factorability of the data gathered. Table 4 shows a KMO value of 0.871, which is above the cut-off of 0.6 as suggested by Pallant (2011). Also, the Bartlett test gave a significant p-value of 0.000. This result implies that the data gathered from the respondents is factorable and ideal for EFA. Further evaluation of the communalities of the data was done to determine

WLB strategies	Male $\overline{X}$	Male Rk	Female $\overline{X}$	Female Rk	Overall $\overline{X}$	Overall Rk	*M–W* *Z*-value	*M–W* *p*-value
Paternity/Maternity leave (WLS9)	4.57	1	4.67	2	4.56	1	−0.665	0.506
Sick leave (WLS10)	4.52	2	4.48	4	4.49	2	−0.530	0.596
Taking annual leaves as required (WLS18)	4.43	3	4.52	3	4.45	3	−0.035	0.972
Health and wellness programme (WLS17)	4.20	8	4.78	1	4.37	4	−2.609	0.009**
Organisation understanding and support (WLS19)	4.33	5	4.44	5	4.36	5	−0.591	0.555
Study leave (WLS2)	4.37	4	4.37	7	4.33	6	−0.395	0.693
Childcare arrangements/benefits (WLS8)	4.28	6	4.15	9	4.23	7	−0.694	0.488
Access to health insurance with family coverage (WLS12)	4.07	10	4.41	6	4.16	8	−1.153	0.249
Telecommuting (WLS11)	4.20	8	4.00	11	4.12	9	−0.362	0.717
Availability and usage of WLB policies (WLS20)	4.02	11	4.22	8	4.09	10	−0.823	0.411
Paid parental leave (WLS7)	4.24	7	3.81	12	4.07	11	−1.174	0.240
Job share (WLS5)	3.85	13	4.07	10	3.95	12	−0.771	0.441
Flexi-time (WLS3)	3.93	12	3.81	12	3.87	13	−0.654	0.513
Flexible holidays (WLS15)	3.52	15	3.74	15	3.61	14	−0.745	0.456
Work from home on an ad hoc basis (WLS4)	3.72	14	3.41	17	3.59	15	−0.662	0.508
Career Break (WLS13)	3.48	17	3.81	12	3.59	15	−1.461	0.144
Rostered days off (WLS6)	3.50	16	3.63	16	3.57	17	−0.114	0.909
Compressed week (WLS14)	3.15	19	3.22	18	3.17	18	−0.137	0.891
Part-time work (WLS1)	3.24	18	2.96	20	3.13	19	−0.979	0.327
Non-paid extra holidays (WLS16)	3.15	19	3.00	19	3.12	20	−0.495	0.620

Note(s): **Significant at *p*-value < 0.05, *M–W* = Mann–Whitney *U* Test, $\overline{X}$ = Mean, Rk = Rank

Table 3. Ranking and Mann–Whitney test of WLB strategies

if the data was adequate for EFA. The result in Table 4 revealed that all the variables were above 0.3, thus affirming that the data gathered was adequate for EFA to be conducted. Based on these preliminary analyses, the EFA conducted using PCA with varimax rotation revealed four principal components with an eigenvalue greater than one and a total cumulative variance of 61%. The extraction of these four principal components was confirmed by the scree plot in Figure 1, as a clear change in the elbow is evident at the fourth component as suggested in Pallant (2011).

Table 4 shows that the first principal component extracted have an eigenvalue of 8.08 and accounted for 40.4% of the total variance extracted. This component has seven variables (WLS2, 7, 8, 9, 10, 11, and 18) loading on it and based on the latent similarity of these variables; the component was named "*leave related strategies*". This naming is guided by Williams *et al.*'s (2010) suggestions that naming factors is theoretical, subjective and inductive, which is mainly based on the researchers' judgements in accordance with the literature. The second principal component has an eigenvalue of 1.49 and accounts for 7.5% of the total variance extracted. In addition, this component has five variables (WLS12, 13, 17, 19, and 20) loading on it and was subsequently named "*health and wellness related strategies*". The third component accounts for 6.9% of the total variance extracted and has an eigenvalue of 1.39. This component contains six variables (WLS1, 3, 4, 14, 15, and 16) and was named "*work flexibility related strategies*". The last component extracted has two variables (WLS5 and 6) and was named "*days off and shared work strategies*".

Confirmatory factor analysis. The four extracted components from EFA were further assessed using CFA in EQS version 6.4 to confirm their validity and applicability. Since the data gathered were non-normal in nature based on the *S–W* normality test conducted, the robust maximum likelihood (RML) estimation offered by EQS was deemed most suitable to accommodate the non-normality in the data. This test gives a Satorra-Bentler scaled

Strategies	Component 1	2	3	4	Comm. Extr	% of var	S–W Stats	S–W *p*-value
Leave- related strategies								
WLS8	0.800				0.786	40.4	0.676	0.000
WLS9	0.718				0.663		0.548	0.000
WLS2	0.711				0.604		0.674	0.000
WLS10	0.646				0.533		0.662	0.000
WLS7	0.640				0.707		0.721	0.000
WLS11	0.560				0.627		0.735	0.000
WLS18	0.455				0.362		0.626	0.000
Health and wellness-related strategies								
WLS17		0.758			0.778	7.5	0.667	0.000
WLS12		0.752			0.757		0.676	0.000
WLS19		0.672			0.572		0.681	0.000
WLS20		0.669			0.724		0.729	0.000
WLS13		0.595			0.631		0.850	0.000
Work flexibility related-strategies								
WLS16			0.647		0.477	6.9	0.888	0.000
WLS15			0.614		0.525		0.876	0.000
WLS1			0.603		0.536		0.897	0.000
WLS3			0.577		0.548		0.839	0.000
WLS4			0.516		0.585		0.854	0.000
WLS14			0.500		0.512		0.906	0.000
Days off and shared work strategies								
WLS6				0.743	0.645	6.2	0.886	0.000
WLS5				0.706	0.626		0.855	0.000
KMO		0.871						
Bartlett's test of Sphericity	Approx. χ^2	735.51						
	df	190						
	Sig	0.000						

Note(s): Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization
Rotation converged in 11 iterations; comm. = communalities; % of var = percentage of variance; *S–W* = Shapiro–Wilk Test

Table 4.
EFA for the WLB strategies

chi-square (*S-B*χ^2), which is a more robust χ^2 (Bartholomew *et al.*, 2006; Byrne, 2008). The internal consistency (reliability) of the data was tested using both Cronbach alpha (α) and Roh alpha (ρA) as their combination give a more robust reliability value (Cepeda-Carrion *et al.*, 2019; Hair *et al.*, 2019). Table 5 revealed that the data gathered were reliable as the α of 0.92 and ρA coefficient of 0.94 derived exceed the 0.7 cut-offs that were set for both tests (Hair *et al.*, 2019).

The result in Table 5 also presents the standardised coefficient (λ) that determines the construct validity of the WLB strategies. It has been suggested that to get a reliable output, careful elimination of variables with low λ is necessary (Anderson and Gerbing, 1988). There has been no consistency in the ideal cut-off for elimination, but past studies have favoured λ as low as 0.4 (Hulland, 1999). For this study, variables with λ less than 0.5 were eliminated with careful consideration given to their influence on the overall fitness of the model. Based on this set cut-off, four variables (WLS 1, 15, 16, and 18) were eliminated from groups 1 and 3. As seen in Tables 3 and 5 and Figure 1, the retained variables show a λ ranging from 0.535 to 0.853. This result implies a good construct validity as the derived λ tend towards 1.

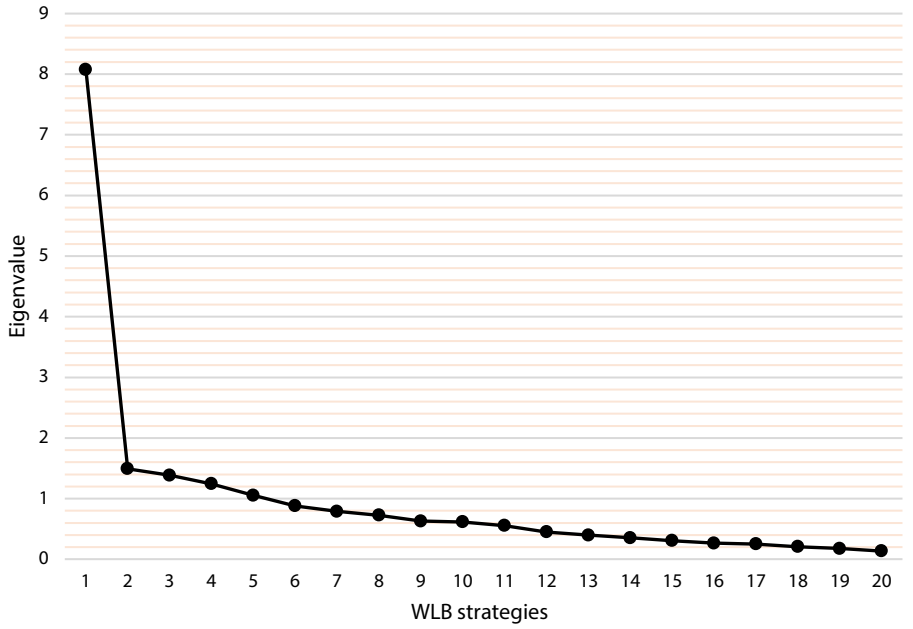

Figure 1.
Scree plot

Groups	Variables	λ	Z	p-value	Group Z	R^2	Group R^2	α	ρA
Leave related strategies (comp1)	WLS2	0.71	6.666	***	4.250	0.50	0.53	0.92	0.94
	WLS7	0.784	7.619	***		0.62			
	WLS8	0.832	4.240	***		0.69			
	WLS9	0.743	7.088	***		0.56			
	WLS10	0.607	5.474	***		0.37			
	WLS11	0.651	5.963	***		0.42			
Health and wellness related strategies (comp2)	WLS12	0.845	7.298	***	3.642	0.72	0.57		
	WLS13	0.748	5.660	***		0.56			
	WLS17	0.618	5.220	***		0.38			
	WLS19	0.675	5.737	***		0.46			
	WLS20	0.853	7.365	***		0.73			
Work flexibility related strategies (comp3)	WLS3	0.637	3.692	***	2.860	0.41	0.48		
	WLS4	0.731	3.968	***		0.54			
	WLS14	0.706	3.899	***		0.50			
Days off and shared work strategies (comp4)	WLS5	0.721	2.716	***	2.180	0.52	0.40		
	WLS6	0.535	2.269	***		0.29			

Note(s): *** = Significant at 95% confidence level

Table 5.
CFA for the WLB strategies

These variables were all significant, as seen in the Z-statistics, which revealed a value of well above 1.96 ($p < 0.05$). Furthermore, each group has a Z-statistics of above 1.96, thus affirming that the principal components are significant.

The predictive accuracy of the assessed variables was tested using the coefficient of determination (R^2). Hair *et al.* (2019) noted that an acceptable R^2 is mostly based on the discipline wherein the study is being conducted. While studies have advocated high R^2 for perfect predictive accuracy, particularly in pure science (Aghimien *et al.*, 2021), Studies in the social sciences allow for R^2 below 50% due to the changes and difficulty in predicting human behaviour (Hair *et al.*, 2019). This current study follows Chin's (1998) cut-off of R^2 to be 0.67, 0.33, and 0.19 for substantial, moderate and weak predictive accuracy. The R^2 column in Table 5 shows that all the variables had substantial predictive accuracy aside from WLS6. Similarly, all four principal components will substantially contribute to effective WLB in the construction industry based on the R^2 derived for each group. Furthermore, Figure 2 shows that these components are correlated at p-value above 0.05.

The fitness of these four principal components to deliver effective WLB was determined using the standardised root-mean-square residual (SRMR) and root-mean-square error of approximation (RMSEA) as suggested by Hu and Bentler (1999). The result revealed a good fit of 0.071 and 0.072 for SRMR and RMSEA, which were below the threshold of less than 0.08 as indicated in past studies (Hu and Bentler, 1999; Oke and Ogunsemi, 2016). To further affirm the fitness of the model, the normed chi-square ($S\text{-}B\chi^2$/Df) gave a good fit of 1.079, which is below the 3.0 threshold (Eisen *et al.*, 1999). The goodness of fit index (GFI) gave a moderate value of 0.780. In contrast, the comparative fit index (CFI), non-normed fit index (NNFI), and incremental fit index (IFI) all gave acceptable values of 0.903, 0.885 and 0.907, respectively. The result implies that the variables assessed are fit to be adopted as the strategies needed for effective WLB in the Eswatini construction industry.

Discussion

Preliminary investigation has revealed that while the concept of WLB is known among construction professionals in the study area, the level of implementation of initiatives that will ensure effective WLB of the construction workforce in the country is still low. This low implementation has also been observed in other countries like Nigeria and Ghana (Baani *et al.*, 2014; Dang, 2020). The findings further revealed that while the male professionals noted that having time off when their spouse gives birth, when they are sick and annually is important, the female professionals noted that it is essential for them to have good health and wellness programmes, as well as maternity and annual leave. It has been observed that women experience more work-life imbalance compared to their male counterparts (Sunindijo and Kamardeen, 2017). This imbalance is a contributing factor to burnout and mental health issues of female construction workers (Watts, 2009), and this has resulted in the fewer number of female construction workers evident in most construction industries (Sunindijo and Kamardeen, 2017; Tijani *et al.*, 2020). It is therefore understandable for female construction workers to want good health and wellbeing programmes along with adequate resting time during pregnancy and within the year. On overall, the strategies for effective WLB can be classified into (1) leave related strategies, (2) health and wellness related strategies, (3) work flexibility related strategies, and (4) days off and shared work strategies.

Leave-related strategies. Past studies have advocated the judicious use of leave options to help improve employees WLB. For instance, Dlamini *et al.* (2019) noted that parental, paternity/maternity, and study leave could help improve the WLB of workers and enhance job performance. The findings of this current study further affirm this submission as paid parental leave ($R^2 = 0.62$), paternity/maternity leave ($R^2 = 0.56$), study leave ($R^2 = 0.50$), and sick leave ($R^2 = 0.37$) were noted as some of the significant leave related variables needed for improved WLB of construction workers. It has been noted that organisations in countries worldwide are bound to implement diverse leave provisions (Burgess *et al.*, 2007; Dex and Bond, 2005). However, the policies surrounding these leaves varies from country to country.

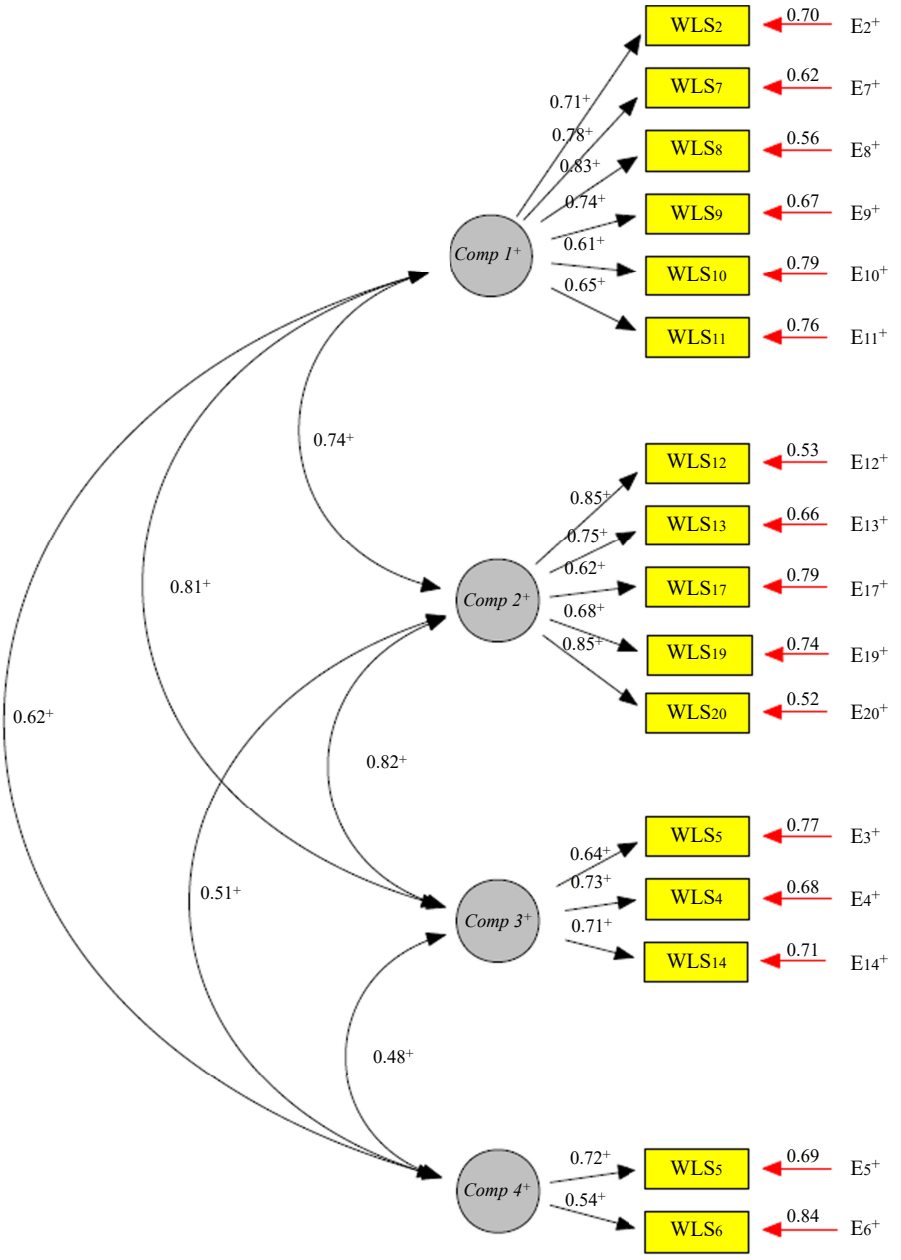

Figure 2.
Strategies for improved WLB in the construction industry

For example, in Eswatini, maternity leave is 12 weeks, with six weeks taken before the due date and two weeks full pay if the employee has worked in the organisation for at least a year. The payment for the remaining ten weeks is at the employer's discretion (Swaziland Government, 2000). More so, there is no statutory paternity or parental leave

(Globalisation partner, 2021). Therefore, it is not surprising to see construction workers stating that an improved leave system can aid their WLB, as evident in other countries like Australia where the leave concept is effective (De Cieri *et al.*, 2005; Lingard *et al.*, 2012). The findings also align with past submissions that childcare benefits (R^2 = 0.69), and telecommuting (R^2 = 0.42) can be effective in attaining significant WLB among construction workers (Forry and Hofferth, 2011; Tijani *et al.*, 2020). Considering the COVID-19 era where onsite work is not required for some workers, improving telecommuting, which allows workers to work remotely, is essential. This will aid the safety of workers and allow them time needed to create better balance in their work and family life (Skinner and Pocock, 2011).

Health and wellness-related strategies. The health and wellness of employees play a crucial role in how they carry out their job functions (Chan *et al.*, 2020). For this reason, the concept of WLB was introduced (Lingard *et al.*, 2012; Muse *et al.*, 2008). Therefore, construction organisations need to adopt effective health and wellness programmes that will aid the WLB of their workers. However, before these programmes can come to life, there is the need for WLB policies to be in place and the management of these organisations to understand and support these policies. Therefore, the availability and usage of WLB policies (R^2 = 0.73), as well as the organisation's understanding and support (R^2 = 0.46), were considered a crucial strategy for WLB in this study. This affirms pasts submissions of Baicker *et al.* (2010) and Chan *et al.* (2020) that have noted the importance of having effective health and wellness programmes and policies to implement these programmes. Health and wellbeing programs like wellness seminars, health and fitness, healthy breakfast and lunches, physical exercise programs, and organisation-based or subsidised gyms can be adopted, as Meyer and Maltin (2010) suggested. More so, Galinsky and Bond (1998) have earlier noted that the use of health insurance with family coverage can be adopted to improve WLB. This submission is in line with the findings of this study which shows that access to health insurance with family coverage (R^2 = 0.72) can go a long way in improving construction workers WLB.

Work flexibility-related strategies. Past studies have emphasised the need for work flexibility to create a balance between the work and personal life of employees (Lingard *et al.*, 2007; Tijani *et al.*, 2020; Wedderburn, 1996). The finding of this current study affirms these past submissions as flexible working time (R^2 = 0.41), work from home on an ad hoc basis (R^2 = 0.54), and compressed week (R^2 = 0.50) were considered crucial strategies needed for construction workers WLB. These approaches have been adopted in diverse countries worldwide, and significant benefits have been recorded (Lingard *et al.*, 2007; Thorgeirsdóttir and Kelliher, 2016; Wedderburn, 1996). However, in Eswatini, the normal statutory working hours in the construction industry should not exceed 45 h, made up of 9 working hours per day (Swaziland Government, 2010). Unfortunately, the Eswatini construction industry, like its counterpart worldwide, is characterised by complex job functions and long working hours that exceed the stipulated 45 h per week (Dlamini *et al.*, 2019). Therefore, there is the need for policies that will ensure flexi-time and compresses working week to improve employees WLB. Lingard *et al.* (2012) noted that using a rostered day off has also been beneficial to WLB of construction organisations in Australia.

Days off and shared work-related strategies. The study found that rostered days off (R^2 = 0.29) and job share (R^2 = 0.52) were revealed as a significant component. This finding is in tandem with the submission of Albertsen *et al.* (2008) that allowing employees to share job functions can lead to immense benefits for the organisation and attainment of WLB. Also, Burnand (2015) noted that job sharing could immensely lower recruitment costs while improving staff effectiveness. Much more, Lingard *et al.* (2012) have earlier noted that in Australia, the when workers are away from work for up to three days away as a result of a public holiday coinciding with a "rostered day off, they tend to complete tasks at home better". Therefore, construction organisations and professional bodies can help improve employees WLB through imbibing the culture of job share and days off.

Implication of findings

The findings of this study have shown that for both male and female construction workers, having maternity, parental and annual leave is essential. While countries worldwide have their minimum leave requirements, construction organisations will do well to ensure that the leave requirements in their organisational policies are designed to comply with international standards and adequately help workers relieve the pressure from work. Also, the study's findings have noted the importance of health and wellness programmes, especially to female construction workers who are encumbered with the challenge of balancing the long working hours of the construction industry with family commitment. To ensure that workers within the industry experience good WLB and be productive, construction organisations must design programmes that will promote health and wellbeing of their workers. In doing this, careful assessment of employee wellness interests and needs and their health risk is necessary to ensure that the designed programme meets the needs of the workers. In addition, seeking the buy-in of senior management whose decision will influence the success of the designed programme is also necessary for health and wellness programmes to be implemented.

There is no naysaying that the COVID-19 pandemic has significantly affected the construction industry worldwide, with major restrictions and shortage of jobs evident, among other issues (Aigbavboa *et al.*, 2022). To circumvent these major restrictions, most organisations have resulted in the use of working remotely for workers whose physical presence are not required on site. For those who cannot work remotely, implementing WLB initiatives such as flexible working hours, compressed weeks, and days off can go a long way in ensuring they have adequate family time like their colleagues working remotely. More so, instead of creating agitation among workers by letting workers go due to the shortage of works during this era of the pandemic, adopting the option of job share will help ensure more workers are retained within the organisation pending when more jobs can be acquired. Through this job share, workers will have some time to attend to family issues while still retaining their source of livelihood.

Conclusion

This study set out to assess the strategies needed to improve the WLB of construction workers in Eswatini. Based on the information gathered from construction professionals, the study concludes that the level of implementation of WLB interventions is low in the study area. The study also found that the key strategies needed for effective WLB can be classified into four significant components, namely: (1) leave, (2) health and wellness, (3) work flexibility, and; (4) days off/shared work. The findings from this study (*science*) could be used to develop management frameworks around WBL strategies as a precursor for bridging the policy-practice interface (Dale *et al.*, 2019). This would enable the revisiting of the *policies* surrounding leave (particularly maternity leave) in Eswatini, thus enabling the creation of a more appealing leave system for workers, which could lead to revising current *practices* and thus improving their WLB. More so, statutory regulations should be created for paternity and parental leaves to encourage WLB among workers in these categories. The study's findings also offer directions for industry development as the identified WLB strategies will help organisations improve the WLB of their workers and, by extension, improve their productivity and overall performance. Much more, organisations, government institutions and professional bodies such as the AESAP can also adopt the study's findings as a guide to shape policies surrounding the wellness of construction workers in the country.

Theoretically, the study offers insight into WLB issues in Eswatini, a country that has not gained significant attention in the existing WLB literature. More so, the findings can serve as a theoretical backdrop for future studies on WLB in similar developing countries around the world. However, while this study contributes to existing knowledge, the findings are limited

by several issues. For instance, there is a possibility of a different outcome had other non-registered construction professionals been included in the study. Therefore, it is recommended that future studies explore the inclusion of more construction professionals drawn from the country's four regions to gather more samples. More so, while the findings from this study are consistent with past studies from other developed and developing countries, the findings cannot be generalised for other countries as the study was based on constructional professionals operating in Eswatini only. Further studies are recommended in countries where such research is absent. Much more, studies seeking the views of high-level managers and construction organisation owners are suggested to get the management perspective of the issue of WLB among their workers as this current study was limited to just construction professionals.

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