RESEARCH ARTICLE

Construction workers work-life balance: A tool for improving productivity in the construction industry

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Abstract: This paper examines the relationship between construction workers work-life balance and productivity in the construction industry in Ghana. Survey method was adopted where 200 Questionnaires were administered to small and medium construction firms and 150 response were obtained. Canonical correlation analysis (CCA) was also carried out to establish the relationship between the predictor (WLB) and criterion latent variable set (Productivity). It emerged that there is a relationship between construction workers work life balance and productivity in the construction industry. This work strives to engender a wider academic debate and renew the need for work life balance policies that will enhance productivity to be revisited. Management of construction organisations must develop and implement construction workers work-life balance polices at their place of work.

Keywords: construction workers, construction industry, Ghana, productivity, work-life balance

1 Introduction

Work-life balance (WLB) is a concept that aim at achieving a balance between the stress of employees, families and their work-life. It is an integration between work and life such that both do not interfere with each other[1]. A balanced work life is the lack of opposition between work and other life roles or the state of equilibrium in which demands for personal, professional and family life are equal[2]. Whereas Amstad et al.[3], claim WLB is the separation between work life and personal life of an employee in an organization.[4] describe it as the boundary that one creates between a professional life, career advancement, personal life or any other segment that makes up the life of an individual. Greenhaus et al.[5], claim it’s the extent to which an individual is equally engaged in and equally satisfied with his or her work role and family role. For Clark[6] it’s a satisfaction and good functioning at work and at home with minimum role conflict’. Similarly, Kirchmeyer[7] suggests it’s about achieving, satisfying experiences in all life domains, and to do so requires personal resources such as energy, time, and commitment to be well distributed across domains.

Organizations within the construction industry are complex and often changes in structure due to geographic mobility with sectorial and economic instability. Construction organizations are also characterized with long working hours and mostly with males as the dominant employees. As such, the construction sector has not yet attracted the needed attention of researchers in terms of understanding the relationship between WLB and productivity in the construction industry. It is probably due to characteristics such as male workers being able to withstand both work and family pressures as well as societal pressure among others[6]. Notwithstanding, the construction sector is one of the most stressful industries due to the nature of activities and long working hours culture. There is therefore the need for construction organizations to have WLB policies in place in order to increase employee’s productivity. Developing and implementing WLB policies will also decrease individual’s health work-related stress and increase productivity by teaching people how to schedule an equal

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number of hours for each day for work and personal activities. Research has also linked job schedule demands to construction professionals’ family functioning in other jurisdictions. For instance, hours worked per week were negatively related to marital satisfaction and positively related to the marital conflict in a survey by Australian civil engineers11. According to Mordi et al.12, WLB drive employees for personal and organizational satisfaction and therefore increase productivity. Asiedu-Appiah13 also concludes that WLB is important in enhancing employee performance at work and home.

Although extant literature has demonstrated a significant understanding of the phenomenon of WLB, most of these studies are concentrated in emerged economies among the white- or blue-collar employees8,14,15. However, there are both cultural and socio-economic issues that are quite distinct in these economies. As argued earlier extant literature on the subject is very scanty in the construction sector in Ghana. This paper therefore aims to establish the relationship between construction workers WLB and productivity in Ghana. The paper adopts a quantitative research strategy and is structured into six sections. Section one introduces the subject of WLB and its importance. Section two describe WLB policy typologies and their effect on employee’s productivity in the construction sector. The research methodology adopted is also describe in section three and four contains the findings. The implications of the study and the conclusions are in section five and six respectively

2 Work-life balance and productivity in the construction industry

The working time of an individual is dictated by the person’s employment contract or the organization commitments whereas family time is purely the discretion of the individuals16. McCann17 then suggests that the clash of time in these two aspects creates an imbalance in two directions. Thus, work life interference tends to dominate the family life. Most at time work and home activities are conflicting with each other making it difficult to create a boundary between the two. It is incumbent upon the construction worker and their employer to discover flexible solutions to increase productivity notwithstanding sacrificing the welfare, safety and personal life of employees. These flexible solutions can be in the form of WLB policies or initiatives that aim at balancing employees work and family life at the same time increasing productivity.

WLB policies include the worker right to take leave from the job18, be able to take part-time working hours19,20, having access to flexible job schedules21, access to school bus or free transport for employees children’s and wards to school20,22, transport for workers to and from work18,20 among others. Leave for instance includes parental leave, time off from work to care for dependents, annual leave, maternity leave extensions, paternity, and adoptive leave18. WLB policies work as a reward to the voluntary and optional efforts put up by employees. Good and sustainable WLB policies can reduce negative spill-over from the lives of employees in the construction sector. It can be done by reducing the long working hours and tiredness that are characteristics among construction workers. It also has the potential of decreasing the rate of stress and ensure a healthy and safe workplace to achieve an accident-free environment23.

In the context of construction organizations, can use any of the above stated WLB policies to reduce work-life conflict and induce organizational commitment that will results in high productivity. To the construction organization, WLB will help improve commitment, and better teamwork and to the individual employee, more value, balance in daily life and work and reduce stress24. Stevens et al.26, conclude that WLB programs or policies have different effects on employees. Darcy et al.25, also believe that WLB policies are closely connected to staff motivation, commitment and retention, which impacts on an organization’s productivity and overall performance. On the other hand, WLB policies benefit not only employees by way of higher job satisfaction and better health, but also benefits employers by decreasing absenteeism and turnover, increased motivation, productivity and performance26. Construction organizations can implement various WLB policy initiatives that can assist employees to better balance their work and family responsibilities, gain improvements in well-being and provide organizational benefits. Besides what has been stated in paragraph two of this section, these family friendly policies can include but not limited to job sharing, telecommuting, work to life conflict, on-site childcare facilities among others.

Productivity on the other hand in the construction context is described in terms of performance factors27, production rate28, unit person-hour (p-h) rate29 among others. However, Orando30, defines it as the ratio of the input of an associated resource to real output. Thus, creating an economic value with the associated input resources. Productivity therefore is the physical progress achieved per person per hour. It is measured by the effectiveness and efficiency with which labour is used in the construction process and how labour is used in doing what it is required to do at a given time and place.

The factors of construction productivity can be categorized into human and management related factors. Whereas the human related factors include staff motiva-
tion, skills development, communication, organizational culture, leadership, loyalty, commitment and the individual attributes of the management related factors are concern with quality of supervision, material management, site planning, constructability, change management among others. These two classes of factors affect the morale and motivation of individuals which ultimately influence productivity directly and affect the entire organization. This study concentrates on the human related factors of productivity that are likely to be affected by WLB variables. It is also because WLB is the separation between work life and personal life of an employee in an organization. Therefore, the relationship between employees work and personal life factors in terms of productivity is very important. Unfortunately, research in this area is very limited particularly in developing countries.

Prior studies have linked job schedule demands to construction professionals’ family functioning. For instance, allowing construction workers to have some flexible working hours in Kotey and Sharma view will allow them to be able to determine the start and end times of their working day life. WLB policies will therefore give workers some ample time to attend to pressing family needs. Moreover, transport for workers provided to reduces latency which will eventually lead to high productivity. It will guarantee the safety of workers and makes them feel recognized.

Furthermore, granting construction workers annual leaves on the other hand will release employees from work stress and create a balance between work and their life activities. Such type of WLB strategy as suggested by Christopher will help employees to perform other duties outside work, which will create a balancing effect between their work, personal and family life activities (Lazar, et al., 2010).

Part-time arrangements are another strategy that can allow construction workers with health problems, disabilities or limited disposable time such as students on internships among others to participate in the labour force in the construction industry and develop their skills and obtain work experience. Although part-time working hours or employment can be unsatisfactory for most employees who prefer working longer hours to increase their income, in the European working conditions survey by it emerged that 85% of employees working less than 30 hours per week were satisfied with their WLB. However, those working less than 35 hours a week reported the lowest levels of both physical and psychological health problems.

The provision of a free bus system for employees' wards to school and back from school can be another strategy to improve productivity in the construction sector. Although, many construction organisations will consider such a strategy as having toll on their finance, it will reduce lateness to work, help workers get a sound mind and work to increase productivity.

Telework or telecommuting in the construction sector can be very difficult to implement but for administrative and office workers it is possible. It involves doing at least some of their regular work from home instead of going to the office. However, most construction activities are on-site activities. Telecommuting will help employees earn more income and increase productivity in the construction industry (Lazar, et al., 2010).

### 3 Research approach

The study adopts a quantitative approach with the use of survey questionnaires. Questionnaires were largely used as an instrument for data collection because it makes deriving large amount of data from a considerable population possible and efficient. The questions had to be expressed in a way that could be comprehensible by the subjects. It was tested by experts, resulting in adjustments where necessary. The choice of this type of methodology is not new to the academic field of human resources management. The questionnaire consists of four sections. The first two sections describe the features and demographics of respondents. The other sections considered the relationship between WLB and productivity in the construction industry. The five-point Likert scale was adopted as the measurement.

Due to challenges in obtaining a comprehensive list of D1K1 to D4K4 contractors and consulting firms operating in both Ashanti and Brong Ahafo regions of Ghana, the non-probability sampling technique was adopted for the investigation. Purposive, convenience and snowballing techniques were adopted, where managing directors, senior project managers, construction workers of government construction agencies and private construction and consulting firms were used to reach the unit being investigated. A total of two hundred (200) questionnaires were deposited at the offices of various construction agencies and consulting firms and 150 were received representing 88%. Out of the 150 questionnaires received, 30 were unable due to errors among others. In all, 94% (n = 112) were male and 6% (n = 8) of the respondents were females. The ages of the respondents ranged between 20 and above 50 years. All respondents were working in construction organizations that are within class D2K2 and D1K1 category of contractors in the country.

A reliability analysis was carried out to ascertain whether the scale chosen reflects the constructs being measured. It is an aspect in which two observations under
study that are equivalent to each other in terms of the construct being measured also have the equivalent outcome. The Cronbach’s alpha tests was used to assess whether the survey was reliable. An acceptable Cronbach alpha value below in, suggest that the data is unreliable. Table 2 showed a high level of internal consistency of the data with a Cronbach’s alpha of 0.939 for the productivity variables and 0.833 for the WLB variables. It means that all the items sufficiently measure both productivity and WLB in the context in which they were described.

### Table 2 Reliability statistics for both productivity and WLB factors

| Variables | Item Code | Mean | Std Deviation | Cronbach’s α |
|-----------|-----------|------|---------------|--------------|
| **Productivity (Criterion) Variables** | | | | |
| 1 | Staff Motivation | SM | 2.40 | 0.803 |
| 2 | Commitment | CT | 2.60 | 0.803 |
| 3 | Loyalty | LT | 3.80 | 1.171 |
| 4 | Skills Development | SD | 3.20 | 1.840 |
| 5 | Leadership | LS | 3.40 | 1.024 |
| 6 | Organizational Culture | OC | 3.00 | 1.420 |
| 7 | Communication | CM | 3.60 | 1.024 |
| **WLB (predictor) Variables** | | | | |
| 1 | Telework | TL | 1.60 | 0.803 |
| 2 | Telework | TL | 1.60 | 0.803 |
| 3 | Part-Time Work | PW | 1.80 | 1.171 |
| 4 | telecommuting | TC | 1.60 | 0.803 |
| 5 | Flexible Job Schedule | FS | 4.00 | 0.889 |
| 6 | Transport for Workers | TW | 2.80 | 1.332 |
| 7 | Leaves and Vacations | FH | 4.00 | 0.635 |
| 8 | School bus for wards | SW | 2.80 | 1.476 |

### Table 3 Multivariate test of significance

| Test Name | Value | Approx. F | Hypoth.DF | Error DF | Sig. of F |
|-----------|-------|-----------|-----------|----------|-----------|
| Pillai’s | 0.2355 | 2.2978 | 16.00 | 589.00 | 0.002 |
| Hotelling’s | 0.2831 | 2.5223 | 16.00 | 570.00 | 0.001 |
| Wilks’ | 0.7729 | 2.4226 | 16.00 | 430.70 | 0.002 |
| Roy’s | 0.2731 | | | | |

Source: Field Survey, 2019

#### 3.1 Canonical correlation analysis

Canonical correlation analysis (CCA) was also carried out to establish a relationship between the predictor (WLB) and criterion latent variable set (Productivity). The initial consideration was to determine the number of canonical functions to be included for interpretation. As CCA usually generate as many functions (i.e variates) when there are variables in the smaller dependent variable set (TL, PW, TC, FS, TW, FH, LV and SW), the analysis derived four canonical functions.

While all the four-test as showed in Table 3 returned statistically significant results at the 0.05 level, the study adopts the most common test which is the Wilks’ lambda (λ). Wilks’ lambda often tend to have the most general applicability[37]. For the full model, Wilks’ λ is 0.773, F (16,430.70) = 2.422, P < 0.002. Thus, the null hypothesis that there is no relationship between the two latent variable sets (Rc = 0) can be rejected. That is, there is a probable relationship between the WLB (predictor) (TL, PW, TC, FS, TW, FH, LV and SW) and the productivity (criterion) variables (SM, CT, LT, SD, LS, OC, CM and IA) across all the four functions.

#### 3.2 Calculating the effect of the relationship

It should be noted that statistically significant results can be impacted heavily by sample size, such that small, unimportant effects can be found statistically significant given large enough sample sizes. Effect size in CCA can be determined by Wilks’ λ, which represents an inverse effect size, or the amount of variance not shared between the variable sets[37]. Therefore, by subtracting this amount from 1 provides us with an overall effect size, that is, the amount of variance shared between the variable sets (1 - 0.773 = 0.227 for the full model). Taken together, the results indicate that the entire model is both statistically significant and has what may be considered a moderate effect size. It’s only those functions that explain a reasonable amount of variation between the two latent variable sets should be interpreted. Considering the squared canonical correlations (Sq. Cor), as shown in Table 4, it is clear that only the first function with Sq. Cor (0.195), which explained 19.5% of the variance within its variable set (0.195), which explained 19.5% of the variance within its function should be retained for interpretation.

Drawing inference from the results presented in the dimension reduction analysis as shown in Table 5, it can be seen that the full model (Functions 1 to 4) is statistically significant, with a Wilks’ λ of 0.773, F (16,430.70)
Table 4: Eigen values and canonical correlations

| Root No | Eigenvalue | Pct | Cum.Pct | Canon.Cor. | Sq. Cor |
|---------|------------|-----|---------|------------|---------|
| 1       | 0.241      | 84.78 | 84.78  | 0.40 | 0.195 |
| 2       | 0.037      | 13.05 | 97.83  | 0.18 | 0.035 |
| 3       | 0.005      | 1.75 | 99.58  | 0.06 | 0.004 |
| 4       | 0.012      | 0.45 | 100.03 | 0.33 | 0.001 |

Source: Field study, 2019

Table 5: Dimension reduction analysis

| Root Nr | Wilks L | F     | Hypoth.DF | Error DF | Sig. of F |
|---------|---------|-------|-----------|----------|-----------|
| 1 to 4  | 0.736   | 2.434 | 16.00     | 430.70   | 0.002     |
| 2 to 4  | 0.985   | 0.698 | 9.00      | 353.05   | 0.758     |
| 3 to 4  | 0.859   | 0.225 | 4.00      | 291.00   | 0.295     |
| 4 to 4  | 0.989   | 0.174 | 1.00      | 147.00   | 0.766     |

Source: Field study, 2019

4 Discussion

The study revealed that most of the respondents are aware of the importance and benefits of WLB policies in their respective companies. In terms of the most important and influential predictors, respondents are of the view that flexible job schedules and flexible working hours are the most influential predictors with a mean score of 4.0 each. For instance, FwH has the potential of allowing workers to meet family or personal commitments and emergencies at home. It will also enable employees to respond to both predictable and unpredictable circumstances concerning their family and work life. Meeting external family needs in terms of participating in family gathering such as attending funerals, weddings and other family reunions are rated highly among Ghanaians. An employee that has such an opportunity through flexible job schedule or working hours scheme will be satisfied and work hard to be given such an opportunity again in future.

Furthermore, flexible job schedule can enable employees to enroll on part-time and weekend programmes and courses to improve their skills and knowledge. These skills sets would be used for the betterment of the construction organisations in the long run. Flexible job schedule can also encourage job rotation among employees which will ensure knowledge sharing among employees. It will also build a strong organizational culture among staff of the company.

They are followed by transportation for workers, leaves and vacations with a mean score of 2.80 each. Transportation for workers, leaves and vacations have significant relationship on their performance and productivity in the construction industry. Their mean values indicate that they have a positive effect on employees performance and productivity when implemented in a construction organization. It can be argued that the provision of transportation benefits to their workers stand to gain competitive advantage over their counterparts. A construction organization benefits by attracting and retaining its workforce, minimizing payroll taxes, expanding working hours, building a reputation as an environmentally and worker friendly organization. Construction organizations can achieve the aim by supporting ridesharing as a strategy to reduce the economic effect of commuting by construction workers.

Another strategy is to maximize the benefits of partnering with other businesses or with transportation management associations such Ghana Private Roads Transport Union among others in Ghana to design company specific transportation solutions for construction companies in the country. Such partnership will support Ghana’s local transit systems and community’s economic development goals by motivating construction workers to use public transportation. The ultimate effect will mean giving construction workers with more disposable income to invest in their communities. It will also have a positive effect on the environment by reducing the carbon footprint and encourage construction workers to riders to work to improves their quality of life.

Leaves can be in the form of a study leave, sick leave, annual or care leave. In the case of a study leave, it is given to any staff member who is undertaking an approved study course for a period of time. In the construction industry training leave is often the ideal form of leave where training is given to an employee for self-development and organization development. It helps such workers to gain more knowledge which is plough back into the organisation to help increase productivity. Sick leave on the hand is the time set off from work that an employee can use to address their health and safety needs without losing their pay for that period. Employee checking their health and safety needs can help them gain enough strength to work and increase productivity in the construction industry since construction is energy demanding in nature. In annual leave situation the paid leave for the purpose of
recreation to which employees become entitled after a period of qualifying service or employment with a particular employer. Furthermore, when employees are granted career’s leave to take time off to take care of an immediate family or household member who is sick or injured or help during a family emergence can be very motivating for such a worker to work hard.

The results are a confirmation that part-time work policy within the construction sector can facilitate re-entry into the workforce for those who have had career breaks, people who have stayed at home and to also provide a gradual exit for employees getting close to their retirement. Part-time work policy has the potential of maximizing the use of human resources and increase operational flexibility, by providing additional coverage during peak periods. Another most important WLB policy is the provision of school bus or transport system for employees’ wards and children as a flexible means of easing their family life and commitments. It emerged that the provision of free transport or bus system to construction workers’ wards is a known WLB within the Ghanaian construction industry. However, the degree at which such a policy has been was not well established. Notwithstanding, it will prevent an employee having a divided mind whiles working on site as to when and who to pick his or her ward. It will therefore reduce stress and sometimes lateness on site.

From the results it can be stress that flexible working time as suggested by [31,38] part-time work hours [20], flexible job schedules [31], school bus or free transport for employees’ children’s and wards to school [20,22], transport for workers [18,20] among others has been acknowledged by this study as WLB policies adoptable by construction organisations in Ghana. The resultant effect of these policies is staff motivation as claimed by [26], skills development, communication, organizational culture, leadership, loyalty, commitment [30], individual attributes [29]. These often lead to increase productivity in the construction industry. The above findings and discussions are a confirmation that there is a relationship between WLB policies and productivity in the construction industry. Implementing such policies can lead to high productivity although majority of construction form seldom implement such policies.

5 The implications for policy, theory and practice

Two main implications emerged from the paper. Firstly, the paper emphasizes on the importance of WLB policies in advancing construction business productivity from a developing country perspective. The expanded knowledge and information therefore provided can be useful in the development of the construction industry from a developing country’s perspective.

The second implication is closely linked with the role of the construction business environment in ensuring conducive family cohesion whiles increasing productivity of employees in the industry. However, the industry constraints in the form of lowest evaluated bidder concept in construction contracts procurement, often compel construction businesses to forgo such an important aspect in their overheads pricing. Such a challenge have systematic effects on employees, employers and the industry in developing countries.

6 Conclusions

It can be concluded that WLC policies have a positive impact on the performance of the industry. That is when WLC policies are implemented in various companies, it will help to increase productivity of the company’s concern. The absence of WLC policies in construction organisations can cause low turnover of workers. The company should take care of employee’s workload to balance the work life. Construction organizations that consider the uniqueness and put attention to workers WLB policies and programs are likely to reduce workers family work conflict and therefore can increase productivity in these organisations.

In this regard, good communication and understanding of the wider impact of WLB policies on construction productivity needs to be at the heart of stakeholders and policy makers in the construction sector in developing countries. Although, the data analyzed are likely to help provide valuable insight into the specific causes of low productivity in the construction industry, there are some limitations that deserve attention. The small sample size might be viewed as a limitation. The absence of additional demographic information about construction organization ownership structure might also be considered as limitations.

References

[1] Meenakshisundaram M and Panchanatham N. A Study of Work Life Balance of Employees with Reference to a Garment Industry-Unit. AMET International Journal of Management, 2012, 3(1): 52-58.

[2] Kvande E. Work-Life Balance for Fathers in Globalized Knowledge Work. Some Insights from the Norwegian Context. Gender, Work and Organization, 2009, 16(1): 58-72. https://doi.org/10.1111/j.1468-0432.2008.00430.x

[3] Amstad FT, Meier LL, Fasel U, et al. A Meta-analysis of Work-Family Conflict and various Outcomes with a special Emphasis on Cross Domain Versus Matching-domain Re-
Bird J. Work-life Balance Defined—what it Really Means. Journal of Occupational Health Psychology, 2011, 16(2): 151. https://doi.org/10.1037/a0022170

Townsend K, Lingard H, Bradley L, et al. Complicated Working Time Arrangements: Construction Industry Case Study. Journal of Construction Engineering and Management, 2012, 138(3): 443-448. https://doi.org/10.1061/(ASCE)CO.1943-7862.0000436

Greenhaus JH, Collins KM and Shaw JD. The Relation Between Work-family Balance and Quality of Life. Journal of Vocational Behavior, 2003, 63(3): 510-531 https://doi.org/10.1016/S0003-8791(02)00042-8

Accel-Team. Employee Motivation, Motivation in the Workplace. Theory and Business Studies, 2005, 11: 1-6.

Muura A, Korian M and Krajnovi S. Work-life and life-work conflicting Croatian companies: Some perspectives. International Journal of Organization Theory and Behavior, 2013, 16(1): 42-67. https://doi.org/10.1108/IJOTB-16-01-2013-B003

Gregory A and Milner S. Work-life Balance: A Matter of Choice? Gender, Work and Organization, 2009, 16(1): 1-13. https://doi.org/10.1111/j.1468-0432.2008.00429.x

Seppala E and King M. Burnout at Work Isn’t Just About Exhaustion. It’s also about Loneliness. Harvard Business Review, 2017.

Bird J. Work-life Balance Defined—what it Really Means. Retrieved October, 2003, 18, 2007.

Lingard H and Sublet A. The Impact of Job and Organizational Demands on Marital or Relationship Satisfaction and Conflict Among Australian Civil Engineers. Construction Management and Economics, 2002, 20(6): 507-521. https://doi.org/10.1080/01446190210156073

Mordi C, Mmihe F and Ojo SI. An Exploratory Study of Managers’ Perspective of WorkLife Balance in Nigeria: A Case Analysis of the Nigerian Banking Sector. Thunderbird International Business Review, 2013, 55(1): 55-75. https://doi.org/10.1002/tie.21523

Asiedu-Appiah F, ID-M. Work-life Balance as a Tool for Stress Management in selected Organization in Institutions in Ghana, Global Advanced Research Journal of Management and Business Studies, 2013, 1: 21.

Cegarra-Letova D, Sanchez-Vidal ME and Gabriel Cegarra-Navarro J. Understanding the Link Between Work Life Balance Practices and Organisational Outcomes in SMEs: The Mediating Effect of a Supportive Culture. Personnel Review, 2012, 41(3): 359-379. https://doi.org/10.1108/0048348121212986

Connell RW and Messerschmidt JW. Hegemonic Masculinity: Rethinking the Concept. Gender and Society, 2005, 19(6): 829-859. https://doi.org/10.1177/0891243205278639

Tammelin M. Working Time and Family Time: Experiences of the Work and Family Interface Among Dual-Earning Couples in Finland (No. 355). University of Jyväskyl, 2009.

Mc Cann D. Regulating working time needs and preferences. In Working Time and Workers’ Preferences in Industrialized Countries, 2004. https://doi.org/10.4324/9780203342473_chapter_1

Guest DE. Perspectives on the study of work-life balance. Social Science Information, 2002, 41(2): 255-279. https://doi.org/10.1177/035901840204102005

Parent-Thirion A. Fourth European working conditions survey. Luxembourg: Office for official Publ. of the European Communities. 2007.

Warren T. Working Parttime: Achieving a Successful Work-life Balance? The British Journal of Sociology, 2004, 55(1): 99-122. https://doi.org/10.1111/j.1468-4446.2004.00008.x

Hayman JR. Flexible work arrangements: Exploring the Linkages between Perceived Usability of Flexible Work Schedules and Work Life Balance. Community, Work & Family, 2009, 12(3): 327-338. https://doi.org/10.1080/13668800902966331

Watts JH. ‘Allowed into a Man’s World’ Meanings of Work-life Balance: Perspectives of Women Civil Engineers as ‘Minority’ Workers in Construction. Gender, Work and Organization, 2009, 16(1): 37-57. https://doi.org/10.1111/j.1468-0432.2007.00352.x

Yang N. Individualism-collectivism and Work-family Interfaces: A Sino-US Comparison. Work and Family: An International Research Perspective, 2005, 3: 287-318.

Voydanoff P and Donnelly BW. Work and Family Roles and Psychological Distress. Journal of Marriage and the Family, 1989: 923-932. https://doi.org/10.2307/353205

Darcy C, McCarthy A, Hill J, et al. Work-life Balance: One size Fits All? An Exploratory Analysis of the Differential Effects of Career Stage. European Management Journal, 2012, 30(2): 111-120. https://doi.org/10.1016/j.emj.2011.11.001

Burke R. ‘Do Managerial Men Benefit from Organizational Values supporting Work. Business Administration Research, 2000, 1(2). https://doi.org/10.1108/09649420010319606

Shehata ME and El-Gohary KM. Towards Improving Construction Labor Productivity and Projects’ Performance. Alexandria Engineering Journal, 2011, 50(4): 321-330. https://doi.org/10.1016/j.aej.2012.02.001

Herbsman Z and Ellis R. Research of Factors Influencing Construction Productivity. Construction Management and Economics, 1990, 8(1): 49-61. https://doi.org/10.1016/0146-669X(90)900000X05

Dozzi SP and AbouRizk SM. Productivity in Construction (p. 44). Ottawa: Institute for Research in Construction, National Research Council. Employee Survey, Employment Relations Research Series, London, No. 27, 1993.

Orando M. The Influence of Human Behaviour Factors on Construction Productivity (Doctoral Dissertation, University of the Free State), 2013.

Kotey B and Sharma B. Predictors of Flexible Working Arrangement Provision in Small and Medium Enterprises (SMEs). The International Journal of Human Resource Management, 2016, 27(22): 2753-2770. https://doi.org/10.1080/09585192.2015.1102160

Christopher K. Paid Leaves as Buffer Zones: Policy Contexts and Work-Life Balance among Canadian Mothers. Journal of Research on Women and Gender, 2015: 6.
[33] Susi S and Jawaharrani K. Work-Life Balance: The Key Driver of Employee Engagement. Asian Journal of Management Research, 2011, 2(1): 474-483.

[34] Hair JF. Multivariate Data Analysis, 7. Black, WC, Babin, BJ, and Anderson, 2010.

[35] Graham JR and Harvey CR. The Theory and Practice of Corporate Finance: Evidence from The Field. Journal of Financial Economics, 2001, 60(2-3): 187-243. https://doi.org/10.1016/S0304-405X(01)00044-7

[36] Taber KS. The Use of Cronbach’s Alpha when Developing and Reporting Research Instruments in Science Education. Research in Science Education, 2018, 48(6): 1273-1296. https://doi.org/10.1007/s11165-016-9602-2

[37] Sherry A and Henson RK. Conducting and Interpreting Canonical Correlation Analysis in Personality Research: A User-Friendly Primer. Journal of Personality Assessment, 2005, 84(1): 37-48. https://doi.org/10.1207/s15327752jpa8401_09

[38] White M, Hill S, McGovern P, et al. High Performance Management Practices, Working Hours and Work-life Balance. British Journal of Industrial Relations, 2003, 41(2): 175-195. https://doi.org/10.1111/1467-8543.00268

[39] Ueda Y. The Relationship Between Work-life Balance Programs and Employee Satisfaction: Gender Differences in the Moderating Effect of Annual Income. Journal of Business Administration Research, 2012, 1(1): 65. https://doi.org/10.5430/jbar.v1n1p65

[40] Lehnert T, Stuhldreher N, Streltchenia P, et al. Sick Leave Days and Costs Associated with Overweight and Obesity in Germany. Journal of Occupational and Environmental Medicine, 2014, 56(1): 20-27. https://doi.org/10.1097/JOM.0000000000000065