

IMPACT OF SUPERVISOR SUPPORT, WORK-HEALTH BALANCE, AND CAREER COMMITMENT ON EMPLOYEES' WORK-LIFE BALANCE IN MANUFACTURING FIRMS OF PAKISTAN: MEDIATING ROLE OF JOB STRESS

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Abstract

Work-life balance is very essential to maintain daily life. This study's objective is to examine the influence of supervisor support, work-health balance, and career commitment on work-life balance in the manufacturing industry in Pakistan. The study's second objective is to examine the role of job stress as a mediator between supervisor support, work-health balance, career commitment, and work-life balance. A total of 255 questionnaires were distributed among the employees working in the manufacturing industry of Karachi. The employees returned 247 questionnaires that were filled by the participant in which 243 questionnaires were identified as useful. The percentage of the valid questionnaire was 95.29%. The gathered data was analyzed and delivered statistical outcomes by developed hypotheses. Tests were performed by using SPSS and PLS-SEM, statistical techniques. The results show that supervisor support, career commitment, and work-health balance have a positive relationship with work-life balance. The supervisor support, career commitment, and work-health balance have a negative relationship with job stress. Job stress mediates the relationship between supervisor support, career commitment, work-health balance, and work-life balance

Keywords: Work-life balance, Job Stress, Work-health balance, Supervisor support, Career Commitment

Introduction

Work-life balance has become the most important issue globally as it increases anxiety among employees. Due to the technologies changes at work have been increasing day to day and adopted at work and personal level, the overlapping among family and work time changes the work nature simple into more complex form. The factors that affect work-life balance can be positive or negative (Navajas-Romero, Ariza-Montes, & Hernandez-Perlines, 2020). Good Work-life balance plays a vital role to enhance the productivity of work. It has been increasing the attention of researchers significantly due to its positive consequences. It has important implications for employees at the workplace. It refers to the equilibrium between career work and employee personal life. Employee personal life includes family commitment, non-work activities, and responsibilities (Talukder, 2019). However, the study on work-life balance has still underdeveloped, only a few previous studies have researched positive work-life balance factors in developed

countries, and the majority of the studies related to the negative factors of work-life balance (Talukder, 2019; Talukder, Vickers, & Khan, 2018). This study's purpose is to determine the factors that positively effects Work-life balance in the manufacturing industry in Pakistan.

In Pakistan, the Manufacturing industry has two-sub industries namely small-scale and large-scale manufacturing. It comprises two sub-sectors viz. Large Scale Manufacturing and Small Scale Manufacturing. In a large manufacturing industry, the numbers of employee are ten or more ten including the service and repair industry (PakistanBureauofStaistics, 2021). The manufacturing sector has been improving and growing day to day. The revenue was Rs 328.23billions in 2018, has reached Rs 268.48billions in 2019. The revenue has increased by 12.29%from 2018 to 2019 (SBP, 2019). Employees in the manufacturing industry must have supervisor support as it increases the performance of the employees, work-health balance, and work-life balance. In the manufacturing industry, many employees specifically labor don't have a work-life balance due to longer working hours, night shifts, lack of supervisor support, low health initiatives offered by companies, and minimum salary(Ganiyu, Derera, Atiku, & Fields, 2020), which negatively influence the work-life balance of employees (Talukder et al., 2018). Previous researchers found a positive impact of supervisor support(Talukder, 2019)work-health balance(Hasan, Khan, Butt, Abid, & Rehman, 2020), and career commitment (Najam, Burki, & Khalid, 2020)on work-life balance. In the manufacturing industry, the longer working hours, night shifts, lack of supervisor support, low health initiatives, and low salary negatively influence the work-life balance of employees and increases job stress(Talukder et al., 2018). However, the study on work-life balance has still underdeveloped, only a few previous studies have researched positive work-life balance factors in developed countries, and the majority of the studies related to the negative factors of work-life balance(Talukder, 2019; Talukder et al., 2018).

It is important to investigate the factors that affect work-life balance and understand the concept that how the support of the supervisor, healthy employee, and career commitment, positively influence the work-life balance of the employees. Moreover, this study bridges the gap from the past existing literature by determining the factors that influence positively work-life balance. Thus, this study adds to the growing research related to determining the impact of supervisor support, work-health balance, and career commitment on job stress and work-life balance. Further, to examine the mediator role of job stress on the relationship between supervisor support, career commitment, work-health balance, and work-life balance in the manufacturing industry in Pakistan.

Literature Review

Theoretical background

The conservation of Resources theory proposed by S. E. Hobfoll (1989)stated that resources positively affect work-life balance. Resources refer to either as entities that are to obtain centrally valued ends or in their act or right and are essentials for employee resistance to stress(Stevan E. Hobfoll, 2002). Moreover, work-life balance resources are

implemented in response to the values and desires of employees to balance work and life (Talukder et al., 2018). Theoretically, if resources are supplied by the organization, then employees can balance their work and personal life easily for instance supervisors support. Supervisors support by inquiring about employees' needs, and concerns, and encourage the employee to feel supported (Talukder et al., 2018). Supervisors can also grant assistance, For instance, by offering flexibility in work time, bringing children to work, and accommodating family needs, it is helpful to reduce stress at work and balance work and life. Supervisory support is driven by the intentions and goodwill of the supervisor to help employees balance their demands of work and personal life (related to the family) (Kumar & Mokashi, 2020).

The job demand–control–support model proposed by Karasek (1979) stated that the characteristics of a job (control, demand, and support) affect the psychological well-being of employees. Employees with jobs characterized by high demands, low social support, and low control in the decision have a high risk of psychosocial distress and poor work-health balance that effect negatively on work-life balance (Davison, Bensch, & Karasek, 1980; Liw & Westlund, 2020). The theory shows a theoretical framework between work and its factors related to the employees' health, control, and social support that affect work-life balance (Navajas-Romero et al., 2020).

According to Kala Sneha (2020), Social exchange theory stated that valuable resources are exchanged in which benefits are expected between two parties. It is an association between the perceptions of employees and behavior. This theory reduces the expected cost and maximizes the benefits (Talukder, 2019). The theory shows that supervisor support and health initiatives at work balance the work life of employees present to enhance the positive attitude, positive behavior of employee, performance, and productivity and leads to success and growth of the organization (Garcia et al., 2020).

Hypotheses development

Supervisor Support and Job Stress

Supervisor support is defined as the extent to which supervisor give value to the contribution of employees and takes care of their employees in the workplace (Talukder et al., 2018). It refers to the behavior of supervisors toward workers that would allow the worker to achieve a balance between their work and home responsibility. Supervisors offer socio-emotional and instrumental support to the employees (such as time flexibility, promotions, food, self-esteem, etc.). Further, provide helps in alleviate and prevent stress, nonworking demands and integrates work, and demonstrates commitment and care for workers (Talukder, 2019).

Baral and Bhargava (2010) examined the association between family and work enrichment, interventions of organization for life-work balance, and outcomes of jobs. The study argues that with positive supervisor support regarding compensation and rewards, employees feel relaxed at work, which leads to positive behavior at work in the education sector in India. Cheng-I Chu, Ming-Shinn Lee, and Hsiang-Ming Hsu (2006) examined the relationship between support, commitment, satisfaction, behavior, and stress

at work among nurses working for public health in Taiwan. The study found a positive relationship between supervisor support and stress at work among employees in Taiwan. Choi, Choi, and Lee (2021) argue that support from supervisors, high-level wages, stability of job, and fairness of organization decreases the stress at work and balance work-life of employees. In contrast, low support from supervisor and high demand for jobs and resources increases the work-life conflict that raises job stress. Dinh (2020) examined the engagement of employees as determinants of the stress and work-life balance in Vietnam industries. Thus, from the above empirical studies, the hypothesis is being developed;

H₁: Supervisor support has a negative impact on job stress

Work-health balance and Job Stress

Work-health balance is a state in which, the employee feels to be able to effectively balance work needs and health, considering the attention of management (Navajas-Romero et al., 2020). On other hand, work-life balance is the equilibrium between career work and employee personal life (Talukder, 2019). Maintaining a work-health balance is essential for a healthy lifestyle, personal life, family, and work. It improves the performance and productivity of employees and reduces employee cost, burnout and loss. Healthy employee put more effort, and works long, which is beneficial for organizational growth and performance (Althammer, Reis, Beek, Beck, & Michel, 2021). Eddy, Wertheim, Hale, and Wright (2019) examined the association between mindfulness traits, job stress, and the reactivity of psychosocial and health self-perceived of employees. The study found that poor health at work including the physical and mental health of employees reduces concentration at work, attention, and the activeness of employee increase job stress. Afsar, Umrani, and Khan (2019) argue that poor health of employee influence positively on job stress leads to misbehavior of employee, then employees think to switch job and decreases their commitment of employee towards the organization, and raise work-life conflict.

Althammer et al. (2021) examined the intervention of mindfulness in promoting the balance between work and life. The study found that interventions and health practicing include training and practicing mindfulness and psychological intervention to maintain work-life balance of employees, and positively increase the satisfaction of jobs among McDonald's' employees in German. Deng, Liu, and Fang (2020) examined the correlation evaluation between job stress and quality of sleep among nurses in community hospitals in China. The study found that lack of sleeping or asleep disturbance due to night shifts leads to poor health (i.e. insomnia) among nurses that increase job stress. Thus, from the above empirical studies, the hypothesis is being developed;

H₂: Work-health balance has a negative impact on job stress.

Career Commitment and Job Stress

A career is an overall experience obtained from behaviors and professional studies throughout the individual's life (Cicek et al., 2016). The commitment to a career is an attitude of employees toward their field and work. The employee's commitment to the career put more effort into work to achieve success (Najam et al., 2020). According to (A. Gragnano, Miglioretti, Frings-Dresen, & de Boer, 2017) it is an employee's attitude toward their career, occupation, and profession. Bardhan et al. (2019) argue that long hours decline mental and physical health of employees at work leading to depression, and anxiety among nurses in health cares in Hong Kong. Eletskiy, Özcan, and Turhan Afsar et al. (2019) said that low salaries of employees and a poor environment of working reduce the commitment of career employee reduces timely that increases the stress of job among nursing staff. In contrast positive career commitment leads to positive satisfaction of job, good behavior of employees at the workplace, reduces job stress, and reduced intention of turnover. Cheng-I Chu et al. (2006) examined the relationship between support, commitment, satisfaction, behavior, and stress at work among nurses working for public health in Taiwan. The study demonstrated that high stress at work reduces the level of commitment.

H₃: Career commitment has a negative impact on job stress

Supervisor Support and Work-life balance

Kumar and Mokashi (2020) refer to appreciation, recognition, and facilitation by the workplace. Appreciation of employee work by supervisor enhances the positive work-life balance of employee. Navajas-Romero et al. (2020) found that social support including coworkers' support and supervisors' support has a positive effect on Work-life balance. The study demonstrated that supervisor support increases the Work-life balance.

According to Talukder et al. (2018) considering the informal and formal success and usage of resources. More resources and support offered by supervisors positively enhance the work-life balance of the employees. Further, the supervisor offers flexible work hours enabling workers to accomplish non-work and work responsibilities and commitment. The nature of the supervisor depends on the environment and psychological conditions enhance the worker's capability to do activities to accomplish the tasks, which leads to promoting the work-life balance.

Talukder (2019) found a positive influence of supervisors' support on work-life balance in the financial sector in Australia. M. H. Talukder and Galang (2021) examined the impact of supervisor support on work-life balance, organizational commitment, life and job satisfaction, and job performance. The study found a positive impact of supervisor support on work-life balance that enhances the job performance of the employee. The study indicated that care from a supervisor such as family support, children care, providing resources at work, flexible work time, and work arrangement positively balance the work and personal life of the employee. Thus, from the above empirical studies, the hypothesis is being developed;

H₄: Supervisor support has a positive impact on work-life balance

Work-health balance and Work-life balance

Shams and Kadow (2019) stated that child labor and working women's health have a negative effect on work-life balance. Child labor health and life should be prevented by the government by offering homes, education, and food for children. Due to more hard work, Female workers have more anxiety, stress, or psychological problems (mental health problems) that imbalance work career and personal life. A. Gragnano et al. (2020) argued that old employees have more health-related issues (such as cardiovascular disease, high blood pressure issues, sugar, etc.) that negatively affect work-life balance and increase the intention to leave or resign, and psychological distress. While, good work-health balance is related to greater job commitment, work-life balance, job satisfaction, and engagement. The study found that work-health balance significantly and positively affects work-life balance, which demonstrated that work-health balance leads to increases work-life balance.

Althammer et al. (2021), investigated the impact of a health intervention on work-life balance. The study found positive effects of psychosocially and physically healthy employees at work on work-life balance. The study demonstrated that work-health balance reduces conflict at work, the stress of the employee, and work-life imbalance. Navajas-Romero et al. (2020) found a positive impact of healthy well-being on work-life balance. The study suggested that there are two types of job demands include psychological and physical job demands. Physical job demand is related to the work-health balance. The good health of employees has a positive impact on work-life balance. If an employee feels depression, stress, anxiety, or poor health of employee at work minimizing the work-life balance that increases the intention of turnover.

Hasan et al. (2020) Stated that physically and psychologically healthy employees balance work and personal life easily. A. Gragnano et al. (2017) work-health balance is positively related to work engagement, the satisfaction of job, work-life balance, and negative related to the workaholic, presentism, psychological distress, and emotional exhaustion. Andrea Gragnano, Boer, and Miglioretti (2015) examined the impact of work-health balance on the work-life balance among old workers. the study found health initiatives and healthy old employees at work positively balance the work and personal life. Thus, from the above empirical studies, the hypothesis is being developed;

H₅: Work-health balance has a positive impact on work-life balance

Career commitment and Work-life balance

Previous studies found a positive relationship between career commitment and work-life balance that follows, Najam et al. (2020) argued that career commitment and success play an essential role in employee and organization growth. The study focused on the career commitment role that balances the work life of employees (such as work-family and family work balance) and leads to career success. The study demonstrated that career

commitment helps employees achieve success in their careers. On the other hand, if employees' low commitment to the career leads to work-life imbalance or work-life conflict, which negatively influences career success.

Cicek et al. (2016) stated that the employee who committed the career put more effort to accomplish the goal or task. Simultaneously, the high commitment to a career leads to achieving high success or career satisfaction such as promotion, high wages, and salary that increases employees' work-life balance too. While, low career commitment leads to failures such as low wages, low income, etc. which increases work-life imbalance. The antecedent of career commitment includes planning, resilience, and identification. Career identity refers to the emotional attachment of an employee to his or her career. Career planning refers to recognizing the need to develop and determine the goals of a career. Career resilience refers to the employee decides not to deviate from his/her job in a negative situation.

Amin, Arshad, and Abdul Ghani (2017), said that the characteristics of career commitment are active involvement, development, persuasion, and identification of career goals of employees. Durate (2017), examined the commitment of employees to change the work-life balance. The study found that the dimension of commitment including involvement, career identification, and emotional attachment has a positive effect on work-life balance. Thus, from the above empirical studies, the hypothesis is being developed;

H₆: Career commitment has a positive impact on work-life balance

Job Stress (Mediator)

Job stress is a harmful, emotional, and physical response, which happens when the requirements of a job do not match the needs, resources, and abilities of workers (Caillier, 2020). It refers to the duties at the job that face difficulty to fulfil. The studies used the term job stress which has four dimensions include workload, conflict of role, the ambiguity of role, and inadequacy of resources. It is beneficial for the firm to prevent stress at work to increase the performance and productivity of the employees which leads to the success of the firm. Managing the stress at work is important because the worker who carried work-related stress leads to a higher intention of turnover, lost workdays, and lower productivity of employees as well which is worst for the organization's growth (Chen et al., 2020). Chen et al. (2020) argued that low autonomy (commitment) at work raises job stress that positively imbalance the work and life of female workers at home in South Korea. support, coping, and self-efficacy have a negative association with job stress that leads to anxiety and burnout at the workplace and effect negatively on the productivity of employees. Giauque D., S., and F (2019) argue that a high level of team and supervisor support offers work opportunities that significantly reduce the stress of the employees at work, which significantly improves work-life balance.

Chiang, Birtch, and Kwan (2010) examined the association between control of the job, work-life balance, and stress of employees in the catering and hotel industry in Hong Kong. The study found that practices of work-life balance at work include stress

management, supporting employees to leave for an important event of family, offering services of child care and counseling, time flexibility increases reducing the job stress of employees, and increasing the balance between work and life of employees. The study demonstrated that a high level of stress happens due to the high demand for the job which decreases work-life balance. Choi et al. (2021) argued that the high burden of job, children's responsibilities, and time pressure at job raise stress at work among female workers at home in South Korea. Thus, from the above empirical studies, the hypothesis is being developed;

H₇: Job stress has a negative impact on work-life balance

H₈: Job stress mediates the relationship between supervisor support and work-life balance

H₉: Job stress mediates the relationship between work-health balance and work-life balance

H₁₀: Job stress mediates the relationship between career commitment and work-life balance

Methodology

The explanatory research purpose was used to deliver outcomes that are possible and offers new ideas on studies that have been done previously for more clarification. It is conducted to provide the solution for the problem that did not conduct properly on previously developed theories and hypotheses in past studies in the particular context. The quantitative approach has been used in this research. Apuke (2017) stated that the data is in quantity or numeric form, data analysis of numerical or mathematical techniques determine the causes and effects problem make the finding and results from interpretation. Furthermore, this study approach is based on quantitative because this study has collected data through questionnaires and data is in numeric form. This research follows a correlational research design. It is used to check the association between variables. It is defined as the association among two or more variables (Samuel & Okey, 2015). It examines the effect and causes among variables to accomplish the outcomes those consider as best. It is an approach to examining influence among the given model of conceptual.

This study used convenience and purposive sampling techniques. These techniques are non-probability sample techniques used for the purpose to choose samples from a population audience, that are conveniently obtainable (convenient), targeted (purposive), and get data through Google form to get authentic results in overall research.

The data was collected from the manufacturing industry in Pakistan. Most data were carried out from professional workers in Karachi. A total of 240 sample data was collected. It was analyzed to measure the statistical outcomes and conceptual model hypotheses. However, a Sample size has been generated. According to (Kline, 2015), the N: q (24 items x 10 = 240 sample) ratio should be 20 to 1, or 20 observations (participants) for each estimated parameter in the model.

The instruments were constructed for data collection and collected data through a questionnaire based on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) where the study identifies the relationship of the independent variables with the dependent variable by getting the questionnaire filled from respondents. This makes up of total 24 items. For supervisor support, all four items have been adopted from (Yang et al., 2015), and for work-health balance, all six items have been adapted from (A. Gragnano et al., 2017). Whereas, career commitment all three items adopted from (Cicek et al., 2016). Job stress is all six items adopted from (Yang et al., 2015). Furthermore, all five items for work-life balance have been adopted from (Talukder et al., 2018)

The collected data were analyzed by using SPSS and PLS-SEM software. Given the data initial analysis was assessed by using the software of SPSS. Second, the software of PLS-SEM was used to assess both the models of structural and measurement (Salem & Salem, 2019; Soomro, 2019). The study examined the model by applying Structural Equation Modeling PLS-(SEM) (Wong, 2013) to measure the collection of data and analyze the relationship between variables and developed hypothesized model from past studies.

Data Analysis

For this research 255 questionnaires were distributed among the employees working in the manufacturing industry of Karachi. The employees returned 247 questionnaires that were filled by the participant in which 243 questionnaires were identified as useful. Out of 247, 4 questionnaires were excluded. Therefore, the percentage of valid questionnaires was 95.29%. The participant profile descriptive statistics were that 174 employees were male and 69 were female, 135 employees belonged to the age group below 25, 106 were between 26 to 30 age, 83 employees age were between 31 to 40, 18 employees were between 40 to 50 age and 1 employee was above 50s age. 20 employees had cleared diplomas, 89 had bachelor's degrees, 127 employees had master's degrees and 7 employees had the Ph.D. degree. 21 employees had income below Rs 20,000, 17 employees had income between Rs 20,000 to Rs 25,000, 16 employees had income between Rs 25,001 to Rs 30,000, 29 employees had income between Rs 30,001 to Rs 35,000 and 160 employees has above Rs 35,001 income. 62 employees had job experience of 1 to 2 years, 45 employees have 3 to 4 years, 43 employees has 5 to 6 years and 93 employees has above 7 years of job experience. The descriptive statistics of variables represent that the scores of the mean of the variables are from 3.2 to 4.2 and the standard deviation values from 0.59 to 0.95. The total numbers of the questionnaire were 243 represented by N.

Measurement Model Assessment

The PLS-SEM comprises an assessment of the measurement model by Algorithm to check the reliability and validity, structural model by bootstrapping determines the relationship between variables and mediating effect of the mediator. The criteria of convergent validity are, that each item's factor loading should be above 0.7 and no single item loading from another construct is higher than the construct being measured (Al-

Maroof & Al-Emran, 2018; J.F. Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). Therefore, to improve the validity and reliability of the data, the items deleted, have lower loading (J.F. Hair, Sarstedt, & Ringle, 2019). Only one item was deleted as the value of loading of that item was less than 0.7 that is WLB3 to retain 23 items, the loadings range from 0.706 to 0.953. Table 1 shows the values of Cronbach's alpha are above 0.7, and composite reliability scores of all variables are above 0.7, indicating that all the variables were highly reliable, and the average variance extracted value of each variable was above the cutoff point of 0.50, which shows that the measurement model was reliable for further analyses.

Table 1: Loadings, Cronbach's Alpha, Reliability of Composite, and AVE					
Construct	Items	Loadings	CA	CR	AVE
Supervisor support			0.838	0.892	0.674
	SS1	0.786			
	SS2	0.847			
	SS3	0.859			
	SS4	0.788			
Work-health balance			0.846	0.886	0.565
	WHB1	0.717			
	WHB2	0.794			
	WHB3	0.706			
	WHB4	0.761			
	WHB5	0.773			
	WHB6	0.755			
Career commitment			0.895	0.935	0.829
	CC1	0.827			
	CC2	0.953			
	CC3	0.946			
Job stress			0.915	0.935	0.706
	JS1	0.847			
	JS2	0.843			
	JS3	0.886			
	JS4	0.896			
	JS5	0.714			
	JS6	0.844			
Work-life balance			0.778	0.857	0.601
	WLB1	0.767			
	WLB2	0.772			
	WLB4	0.772			
	WLB5	0.788			

Table 2 shows that the extracted average variance square root was greater than the correlation between the variables latent, which indicates adequate discriminant validity (Fornell & Larcker, 1981). The results indicated that no variable was dropped after performing PLS Algorithm.

Table 2: Fornell-Larcker Criterion					
	CC	JS	SS	WHB	WLB
CC	0.910				
JS	-0.091	0.840			
SS	0.413	-0.367	0.821		
WHB	0.347	-0.328	0.435	0.752	
WLB	0.366	-0.378	0.48	0.665	0.775

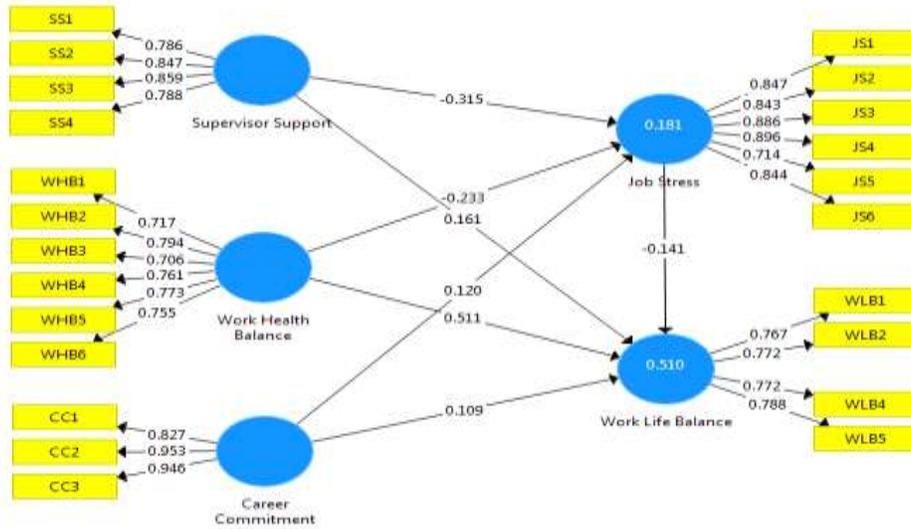
Note: SS= Supervisor support; WHB = Work-health balance; CC = Career commitment; JS = Job stress; WLB = Work-life balance

The factor loading values of constructs were greater in their constructs when compared to the other loadings in other constructs. All the loadings are greater than 0.7 or around the threshold value. Table 3 shows that the values of all constructs were below the threshold value of 0.9 (J. Henseler & Fassett, 2010). Hence, the discriminant validity has been achieved by HTMT, indicating that the values for the inter-construct ratio were below 0.90 and that the confidence intervals did not contain the value of 1.0 (J.F. Hair et al., 2011; J. Henseler, Hubona, & Ray, 2016)

Table 3: Heterotrait-Monotrait Ratio					
	CC	JS	SS	WHB	WLB
CC					
JS	0.107				
SS	0.475	0.418			
WHB	0.396	0.371	0.509		
WLB	0.432	0.445	0.589	0.811	

Note: SS= Supervisor support; WHB = Work-health balance; CC = Career commitment; JS = Job stress; WLB = Work-life balance

Figure 4.1 Measurement Model Results by Algorithm



Structural Model Significance Assessment

Table 4 shows that the job stress R square value was 0.181 which is weak and the work-life balance R square value was 0.510 near substantial. The minimum acceptable threshold of value of R² is 0.10 (J. F. Hair, Celsi, Ortinau, & Bush, 2010). According to Chin (1998), the R² values assessment criteria is 0.19 consider weak 0.33 as moderate, and 0.67 as substantial.

Constructs	R Square	Results
Job Stress	0.181	Weak
Work Life Balance	0.510	Near to Substantial

Direct Relationships with Job Stress and Work-life balance

The analysis of the structural model has been performed to examine the association among variables. Figure 4.2 shows the results of bootstrapping which shows path coefficient and t-values.

The result shows in Table 5 that there is a negative effect of supervisor support, and work-health balance on job stress. H1 t-value is 6.418, and beta is -0.318. H2 t value is 4.386 and beta is -0.232. Thus, H1 and H2 were supported. The negative beta value

shows that one-time increases in SS and WHB reduce the JS. However, commitment has a positive effect on stress. H3 t value is 2.716 and beta is 0.119. The positive beta shows that one-time increases in CC increase the JS. The result shows the positive and direct effect of supervisor support, work-health balance, and commitment on work-life balance. The t-value is 2.72, 11.40, and 1.751. The beta is 0.165, 0.509, and 0.105 Thus, H4 to H6 were supported. The result shows the negative effect of job stress on work-life balance. The t-value is 3.25. The beta is -0.144. Thus, H7 was supported. The negative beta shows that one-time increases reduce the work-life balance.

Hypotheses	Relationship	Beta	Standard Error	T Value	P Value	Decision
H1	SS -> JS	-0.318	0.049	6.418	0.000	Supported
H2	WHB -> JS	-0.232	0.053	4.386	0.000	Supported
H3	CC -> JS	0.119	0.044	2.716	0.003	Supported
H4	SS -> WLB	0.165	0.059	2.720	0.003	Supported
H5	WHB -> WLB	0.509	0.045	11.440	0.000	Supported
H6	CC -> WLB	0.105	0.062	1.751	0.040	Supported
H7	JS -> WLB	-0.144	0.043	3.253	0.001	Supported

Note: SS= Supervisor support; WHB = Work-health balance; CC = Career commitment; JS = Job stress; WLB = Work-life balance

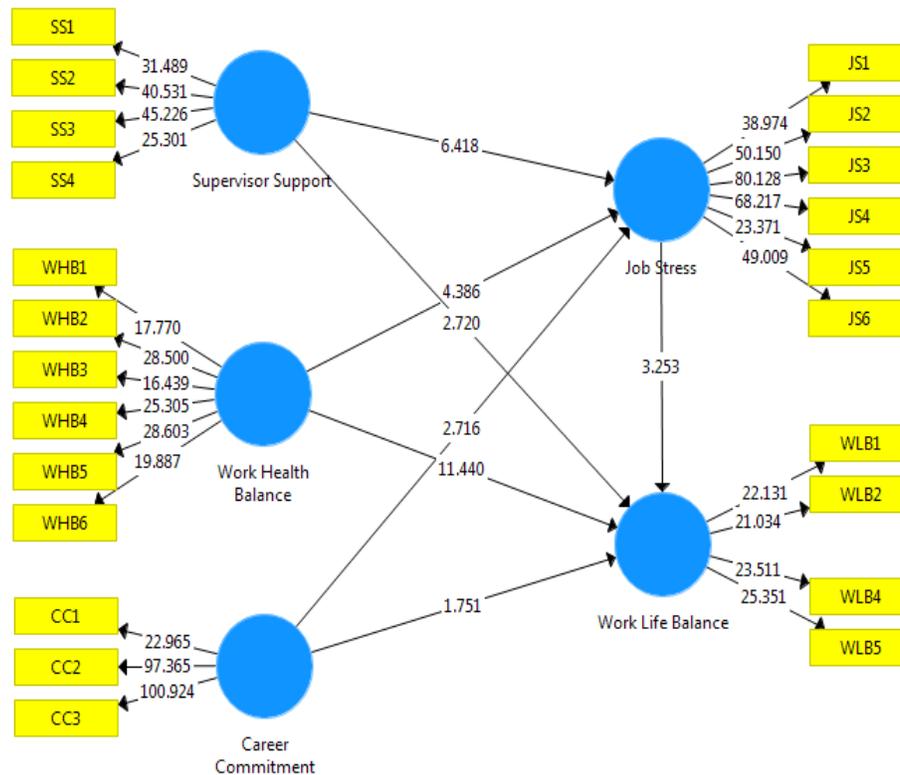
Indirect Relationship with Work-life balance

Table 6 shows the result that job stress mediates the impact of career commitment, supervisor support, and work-health balance on work-life balance. One-tailed t value of 1.645 has been considered because the one direction of each hypothesis was determined by previous studies.

Hypotheses	Relationship	Beta	Standard Error	T Value	P Value	Decision
H8	SS -> JS -> WLB	0.046	0.016	2.795	0.003	Supported
H9	WHB -> JS -> WLB	0.033	0.013	2.583	0.005	Supported
H10	CC -> JS -> WLB	-0.017	0.008	2.008	0.023	Supported

Note: SS= Supervisor support; WHB = Work-health balance; CC = Career commitment; JS = Job stress; WLB = Work-life balance

The result shows that job stress mediates the effect of supervisor support on work-life balance. The t-value is 2.79 and the beta is 0.046. Thus, hypothesis 8 was supported. The result shows that job stress mediates the effect of work-health balance on work-life balance. The t-value is 2.58 and the beta is 0.033. Thus, hypothesis 9 was supported. The result shows that job stress mediates the effect of commitment on work-life balance. The t-value is 2.008 and the beta is -0.017. Thus, hypothesis 10 was supported.

Figure 4.2 Results of Structural model

Discussion and Conclusion

The findings supported previous studies and developed a hypothesis. The present study developed ten hypotheses and all ten hypotheses were supported. The result supported H₁, Baral, and Bhargava (2010) found a negative effect of supervisor support on the stress of the job. Dinh (2020) argued that support from supervisors, high-level wages, stability of job, and fairness of organization decreases the stress at work and balance work-life of employees. In contrast, low support from supervisor and high demand for jobs and resources increases the work-life conflict that raises job stress (Talukder, 2019).

The result supported H₂, Eddy, Wertheim, Hale, and Wright (2019) found that poor health at work includes physical and mental health of employees reduce concentration at work, attention, and activeness of employees increase job stress. Afsar, Umrani, and Khan (2019) found the negative effect of work-health balance on stress. The reason is a healthy employee has positive thinking, is well behaved, put in more effort,

and works long which increases employee performance and productivity, and reduces stress (Althammer, Reis, Beek, Beck, & Michel, 2021).

The result supported H₃, Cheng-I Chu, Ming-Shinn Lee, and Hsiang-MingHsu (2006) found the association between work stress and commitment is negative. Bardhan et al. (2019) found that a high level of job demand and over-commitment to the job such as commitment to working for long hours or day and night shifts increases the level of stress. Further. The reason behind that high commitment to a job and low performance and productivity increase job stress (Najam et al., 2020).

The result supported H₄, Navajas-Romero, Ariza-Montes, and Hernandez-Perlines (2020) found that social support including coworkers' and supervisor's support have a positive effect on Work-life balance. Talukder, Vickers, and Khan (2018) found that supervisor support positively influences the work-life balance of employees. The reason behind that employee appreciation, recognition, and facilitation by the supervisor at the workplace build the work-life balance of employees (Kumar & Mokashi, 2020).

The result supported H₅, Gragnano, Simbula, and Miglioretti (2020) argued that employees have fewer health-related issues that positively affect work-life balance. Shams and Kadow (2019) found a positive effect of good work health on work-life balance. The reason is that work-health balance gives more life and work happiness at the job that maintains work-life balance (Navajas-Romero et al., 2020).

The result supported H₆, Najam, Burki, and Khalid (2020) found a positive effect of commitment on life and work balance. Amin, Arshad, and Abdul Ghani (2017) found a positive relationship between career commitment and work-life balance. The reason behind that high commitment to a career leads to achieving high success or career satisfaction such as promotion, high wages, and salary that increases employees' work-life balance too (Cicek, Karaboga, & Sehitoglu, 2016).

The result supported H₇, Althammer et al. (2021) found psychosocial strains of conflict between work and family negatively affect the work-life balance. Cheng-I Chu et al. (2006) found the stress of employees at work negatively influences the behaviors of citizenship organization and imbalances between work and life. The reason behind that stress increases anxiety, reduce confidence level, slow work speed, sleeping difficulties, depression, and misbehavior of employee that strongly affect work-life balance (Chiang, Birtch, & Kwan, 2010)

The result supported H₈ to H₁₀, Dinh (2020) found negative feedback, deadlines, and time pressure from the supervisor create tension at work and increase the level of job stress that imbalance the work and life of employees. Eisapareh, Nazari, Kaveh, and Ghahremani (2020) found that support from supervisors such as flexibility for the arrangement of work, time flexibility engorgement and positive feedback decrease the stress at work which improves the quality of work life or balance work life of employees. Eisapareh et al. (2020) found good health and work-life significantly decrease job stress which improves work-life balance among employees in the Dezful industry in Iran. Fahlevi (2020) found that health preventions at work and practices of work-life balance

(namely, working hours' flexibility, reducing work pressure, improving working conditions, offering health bonuses, and provide family-friendly benefits) reduce psychosocial stress at work significantly improve work-life balance among banking employees in Jakarta.

Cheng-I Chu et al. (2006) found support from the supervisor such as help in completing the task, providing solutions to the problems, motivations, and concerns to reduce the stress of employees at work and positively balance work and life. Choi et al. (2021) found low commitment at work raises job stress that positively imbalances work and life. Fontinha, Easton, and Van Laar (2019) found that well-being, high level of commitment, and work control empowerment, decrease the stress at work and balance between organizational and personal life among employees in higher education in the United Kingdom. The results suggested that making health care policies in an organization increases the productivity of an employee, improves employees' work-life balance, and is beneficial for the organization's growth. The reason behind that support from supervisor, good health of the employee and emotional attachment of employee with organization reduces depression or anxiety at work that significantly balances the life and work of employees.

Managerial Implication

The study is beneficial for human resource management as it gives complete insights into the benefits and importance of work-life balance. It helps to increase the balance between employees' work and daily life and its benefits for the organization too. This study is helpful for all organizations including all types of sectors or industries (e.g. research centers, retailing sector, education sector, etc.). Furthermore, human resources management can use different strategies to prevent negative factors of work-life balance including workload, work-family conflict, family-work conflict, work hours inflexibility, and enhance the positive factors of work-life balance practices that are supervisor support, work arrange, work hours flexibility, autonomy, emotional intelligence, work-family balance, family work balance, etc. However, the positive factors of work-life balance that increase the productivity and performance of the employees. For management, stress awareness is useful for employees at the individual level to avoid personal problems at work and be active and relaxed at work. This exploration is likewise useful for many organizations to understand stress interventions as it builds their abilities to assess employees and understand how stress management intervention and its assessment have an amazing effect on employees' positive behavior, work stress, and positive employee outcomes of the organization.

Recommendation

Future research has also been recommended to conduct their studies in other industries and countries so that its finding can be generalized and implemented on a larger scale. Moreover, it also has been recommended to study other factors that are considered important. to determine the importance of the balance of work lifeplays a significant role in reducing job stress and increasing the productivity of employees and performance. For

example, bonuses, free trip passes, monthly rewards for employees, security and privacy on work, interesting work tasks and changes of duties, etc. can be taken to get improved results.

References

- Afsar, B., Umrani, W. A., & Khan, A. (2019). The impact of perceived calling on work outcomes in a nursing context: The role of career commitment and living one's calling. *Journal of Applied Biobehavioral Research*, 24(1), e12154. doi: 10.1111/jabr.12154
- Althammer, S. E., Reis, D., Beek, S., Beck, L., & Michel, A. (2021). A mindfulness intervention promoting work-life balance: How segmentation preference affects changes in detachment, well-being, and work-life balance. *Journal of Occupational and Organizational Psychology*. doi: 10.1111/joop.12346
- Amin, S., Arshad, R., & Abdul Ghani, R. (2017). Spousal Support and Subjective Career Success: The Role of Work-Family Balance and Career Commitment as Mediator. *Jurnal Pengurusan*, 50, 133-142. doi: 10.17576/pengurusan-2017-50-12
- Andesna Nanda, Mochamad Soelton, Sita Luiza, & Saratian, E. T. P. (2019). The Effect of Psychological Work Environment and Work Loads on Turnover Interest, Work Stress as an intervening Variable.
- Apuke, O. D. (2017). Quantitative Research Methods: A Synopsis Approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 6(11), 40-47. doi: 10.12816/0040336
- Aziz-Ur-Rehman, M., & Siddiqui, D. A. (2019). Relationship Between Flexible Working Arrangements and Job Satisfaction Mediated by Work-Life Balance: Evidence From Public Sector Universities' Employees of Pakistan. *International Journal of Human Resource Studies*, 10(1), 104. doi: 10.5296/ijhrs.v10i1.15875
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22, 309–328. doi: 10.1108/02683940710733115
- Baral, R., & Bhargava, S. (2010). Work-family enrichment as a mediator between organizational interventions for work-life balance and job outcomes. *Journal of Managerial Psychology*, 25(3), 274-300. doi: 10.1108/02683941011023749
- Barber, L. K., Conlin, A. L., & Santuzzi, A. M. (2019). Workplace telepressure and work-life balance outcomes: The role of work recovery experiences. *Stress Health*, 35(3), 350-362. doi: 10.1002/smi.2864
- Bardhan, R., Heaton, K., Davis, M., Chen, P., Dickinson, D. A., & Lungu, C. T. (2019). A Cross-Sectional Study Evaluating Psychosocial Job Stress and Health Risk in

- Emergency Department Nurses. *Int J Environ Res Public Health*, 16(18). doi: 10.3390/ijerph16183243
- Bataineh, K. a. (2019). Impact of Work-Life Balance, Happiness at Work, on Employee Performance. *International Business Research*, 12(2), 99. doi: 10.5539/ibr.v12n2p99
- Bellmann, L., & Hübler, O. (2020). Working from home, job satisfaction, and work-life balance – robust or heterogeneous links? *International Journal of Manpower*, ahead-of-print(ahead-of-print). doi: 10.1108/ijm-10-2019-0458
- Caillier, J. G. (2020). The Impact of Workplace Aggression on Employee Satisfaction With Job Stress, Meaningfulness of Work, and Turnover Intentions. *Public Personnel Management*, 50(2), 159-182. doi: 10.1177/0091026019899976
- Charoensukmongkol, P., & Phungsoonthorn, T. (2020). The effectiveness of supervisor support in lessening perceived uncertainties and emotional exhaustion of university employees during the COVID-19 crisis: the constraining role of organizational intransigence. *J Gen Psychol*, 1-20. doi: 10.1080/00221309.2020.1795613
- Chen, J., Li, J., Cao, B., Wang, F., Luo, L., & Xu, J. (2020). Mediating effects of self-efficacy, coping, burnout, and social support between job stress and mental health among young Chinese nurses. *J Adv Nurs*, 76(1), 163-173. doi: 10.1111/jan.14208
- Cheng-I Chu, Ming-Shinn Lee, & Hsiang-MingHsu. (2006). The Impact of Social Support and Job Stress on Public Health Nurses' Organizational Citizenship Behaviors in Rural Taiwan.
- Chiang, F. F. T., Birtch, T. A., & Kwan, H. K. (2010). The moderating roles of job control and work-life balance practices on employee stress in the hotel and catering industry. *International Journal of Hospitality Management*, 29(1), 25-32. doi: 10.1016/j.ijhm.2009.04.005
- Choi, E. Y., Choi, S. H., & Lee, H. (2021). The Association between Job Quality Profiles and Work-Life Balance among Female Employees in Korea: A Latent Profile Analysis. *Int J Environ Res Public Health*, 18(4). doi: 10.3390/ijerph18041672
- Cicek, I., Karaboga, T., & Sehitoglu, Y. (2016). A New Antecedent of Career Commitment: Work to Family Positive Enhancement. *Procedia - Social and Behavioral Sciences*, 229, 417-426. doi: 10.1016/j.sbspro.2016.07.152
- Davison, P. M., Bensch, K., & Karasek, M. A. (1980). Isolation and growth of endothelial cells from the microvessels of the newborn human foreskin in cell culture. *J Invest Dermatol*, 75(4), 316-321. doi: 10.1111/1523-1747.ep12530941

- Deng, X., Liu, X., & Fang, R. (2020). Evaluation of the correlation between job stress and sleep quality in community nurses. *Medicine (Baltimore)*, 99(4), e18822. doi: 10.1097/MD.00000000000018822
- Dinh, L. N. (2020). Determinants of employee engagement are mediated by work-life balance and work stress. *Management Science Letters*, 923-928. doi: 10.5267/j.msl.2019.10.003
- Durate. (2017). Affective Commitment to Change and Work-Life Balance: Mediating Factors.
- Eddy, P., Wertheim, E. H., Hale, M. W., & Wright, B. J. (2019). Trait Mindfulness Helps Explain the Relationships Between Job Stress, Physiological Reactivity, and Self-Perceived Health. *J Occup Environ Med*, 61(1), e12-e18. doi: 10.1097/JOM.0000000000001493
- Eisapareh, K., Nazari, M., Kaveh, M. H., & Ghahremani, L. (2020). The relationship between job stress and health literacy with the quality of work life among Iranian industrial workers: The moderating role of social support. *Current Psychology*. doi: 10.1007/s12144-020-00782-5
- Eletskiy, N., Özcan, E., & Turhan, T. (2019). The effect of burnout and stress on organizational commitment: example of health workers. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 6(6), 22-36.
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1. doi: 10.11648/j.ajtas.20160501.11
- Fahlevi, M. (2020). Work-Life Balance and Job Satisfaction: A Case Study of Employees on Banking Companies in Jakarta.
- Fiernaningsiha, N., Nimranb, U., Raharjoc, K., & Arifind, Z. (2019). The Role of Supervisory Support and Life Balance Work in Increasing Organizational Citizenship Behavior: Study at Hotel Employees in Malang.
- Fontinha, R., Easton, S., & Van Laar, D. (2019). Overtime and quality of working life in academics and nonacademics: The role of perceived work-life balance. *International Journal of Stress Management*, 26(2), 173-183. doi: 10.1037/str0000067
- Ganiyu, I. O., Derera, E., Atiku, S. O., & Fields, Z. (2020). Measuring the effectiveness of work-life balance strategies in the manufacturing sector. *SA Journal of Human Resource Management*, 18. doi: 10.4102/sajhrm.v18i0.1216
- Garcia, L. C., Shanafelt, T. D., West, C. P., Sinsky, C. A., Trockel, M. T., Nedelec, L., . . . Fassiotto, M. (2020). Burnout, Depression, Career Satisfaction, and Work-Life Integration by Physician Race/Ethnicity. *JAMA Netw Open*, 3(8), e2012762. doi:

10.1001/jamanetworkopen.2020.12762

- Giauque D., S., A.-B., & F, V. (2019). Stress and Turnover Intents in International Organizations: Social Support and Work-life balance as Resources. *International Journal of Human Resource Management*.
- Gragnano, A., Boer, A. d., & Miglioretti, M. (2015). Work-Health Balance - A new construct to explain workers' well-being after RTW. doi: 10.13140/RG.2.1.4213.5769
- Gragnano, A., Miglioretti, M., Frings-Dresen, M. H. W., & de Boer, A. (2017). Adjustment between work demands and health needs: Development of the Work-Health Balance Questionnaire. *Rehabil Psychol*, 62(3), 374-386. doi: 10.1037/rep0000121
- Gragnano, A., Simbula, S., & Miglioretti, M. (2020). Work-Life Balance: Weighing the Importance of Work-Family and Work-Health Balance. *Int J Environ Res Public Health*, 17(3). doi: 10.3390/ijerph17030907
- Hasan, Z. u., Khan, M. I., Butt, T. H., Abid, G., & Rehman, S. (2020). The Balance between Work and Life for Subjective Well-Being: A Moderated Mediation Model. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 127. doi: 10.3390/joitmc6040127
- Hege, A., Lemke, M. K., Apostolopoulos, Y., Whitaker, B., & Sonmez, S. (2019). Work-Life Conflict among U.S. Long-Haul Truck Drivers: Influences of Work Organization, Perceived Job Stress, Sleep, and Organizational Support. *Int J Environ Res Public Health*, 16(6). doi: 10.3390/ijerph16060984
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. . doi: <https://doi.org/10.1037/0003-066X.44.3.513>
- Hobfoll, S. E. (2002). Social and Psychological Resources and Adaptation. *Review of General Psychology*, 6(4), 307-324. doi: 10.1037/1089-2680.6.4.307
- Holland, P., Tham, T. L., Sheehan, C., & Cooper, B. (2019). The impact of perceived workload on nurse satisfaction with work-life balance and intention to leave the occupation. *Appl Nurs Res*, 49, 70-76. doi: 10.1016/j.apnr.2019.06.001
- Jaharuddin, N. S., & Zainol, L. N. (2019). The Impact of Work-Life Balance on Job Engagement and Turnover Intention.
- Kala Sneha, D. G. S. M. (2020). Occupational stress, burnout, and work performance of government school teachers in port blair, andaman and Nicobar islands. *Journal of Xi'an University of Architecture & Technology*.

- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. . *Administrative Science Quarterly*, 24, 285/308.
- Kaur, R., & Randhawa, G. (2020). Supportive supervisor to curtail turnover intentions: do employee engagement and work-life balance play any role? *Evidence-based HRM: a Global Forum for Empirical Scholarship*, ahead-of-print(ahead-of-print). doi: 10.1108/ebhrm-12-2019-0118
- Kline, R. B. (2015). Principles and practice of structural equation modeling. Guilford publications.
- Kumar, R., & Mokashi, U. M. (2020). COVID-19 and Work-Life Balance: What about Supervisor Support and Employee Proactiveness? *Annals of Contemporary Developments in Management & HR*, 2(4), 1-9. doi: 10.33166/acdmhr.2020.04.001
- Liw, O., & Westlund, L. (2020). Upplevelsen av Work-Life Balance hos poliser i yttre tjänst.
- Najam, U., Burki, U., & Khalid, W. (2020). Does Work-Life Balance Moderate the Relationship between Career Commitment and Career Success? Evidence from an Emerging Asian Economy. *Administrative Sciences*, 10(4), 82. doi: 10.3390/admsci10040082
- Navajas-Romero, V., Ariza-Montes, A., & Hernandez-Perlines, F. (2020). Analyzing the Job Demands-Control-Support Model in Work-Life Balance: A Study among Nurses in the European Context. *Int J Environ Res Public Health*, 17(8). doi: 10.3390/ijerph17082847
- Page, C., & Meyer, D. (1999). *The applied research design for business and management*: McGraw-Hill Higher Education.
- PakistanBureauofStaistics. (2021). Industry.
- Salem, S. F., & Salem, S. O. (2019). Effects of Social Media Marketing and Selected Marketing Constructs on Stages of Brand Loyalty. *Global Business Review*, 097215091983086. doi: 10.1177/0972150919830863
- Samuel, M., & Okey, L. E. (2015). The relevance and significance of correlation in social science research. *International Journal of Sociology and Anthropology Research*, 1(3), 22-28.
- SBP. (2019). Financial Statements Analysis of Companies (Non-Financial) Listed at Pakistan Stock Exchange.
- Shams, K., & Kadow, A. (2019). The Relationship Between Subjective Well-Being and Work-Life Balance Among Labourers in Pakistan. *Journal of Family and Economic Issues*, 40(4), 681-690. doi: 10.1007/s10834-019-09631-5

- Soomro, Y. A. (2019). Antecedents of brand loyalty in the fashion industry of Pakistan: Moderating effect of Individual-level collectivist values. *Journal of organizational Studies and Innovation*, 6(9).
- Stephan, U., Li, J., & Qu, J. A fresh look at self-employment, stress, and health: accounting for self-selection, time and gender. *International Journal of Entrepreneurial Behavior & Research*.
- Subramaniam, A. (2020). Job Stress, Co-Worker Support, Role Expectation Conflict and Work-Life Balance Among Working Women: A Quantitative study on Multinational Companies in Vietnam.
- Talukder. (2019). Supervisor Support and Organizational Commitment: The Role of Work-Family Conflict, Job Satisfaction, and Work-Life Balance. *Journal of Employment Counseling*, 56(3), 98-116. doi: 10.1002/joec.12125
- Talukder, Vickers, M., & Khan, A. (2018). Supervisor support and work-life balance. *Personnel Review*, 47(3), 727-744. doi: 10.1108/pr-12-2016-0314
- Talukder, M. H., & Galang, M. C. (2021). supervisor support for employee performance in Australia: the mediating role of work-life balance, job, and life attitude.
- Ukwadinamor, C. U., & Oduguwa, A. S. (2020). Impact of Work Overload and Work Hours on Employees Performance of Selected Manufacturing Industries in Ogun State. doi: 10.9790/487X-2211011625
- Wong, K. K. K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1-32. doi: 10.17524/repec.v10i3.1376
- Yang, T., Shen, Y. M., Zhu, M., Liu, Y., Deng, J., Chen, Q., & See, L. C. (2015). Effects of Co-Worker and Supervisor Support on Job Stress and Presenteeism in an Aging Workforce: A Structural Equation Modelling Approach. *Int J Environ Res Public Health*, 13(1), ijerph13010072. doi: 10.3390/ijerph13010072
- Yukongdi, V., & Shrestha, P. (2020). The influence of affective commitment, job satisfaction and job stress on turnover intention: A study of Nepalese bank employees. *Review of Integrative Business and Economics Research*, 9, 88-98.