

According to Siagian (2014), sources of stress that come from workers can vary, such as a task that is too heavy, time pressure, a work climate that creates a sense of insecurity, lack of information from feedback about one's work performance, an imbalance between authority and responsibility, unclear roles of employees in the overall activities of the organization, etc. The results of previous research conducted by Prihatini (2008) showed that there was a significant positive relationship between workload and work stress. The same research was also carried out by Dewi (2012), and the results showed that there was a relationship between workload and stress. The results of this study are also supported by the results of the same study conducted by Haryanti, et al. (2013).

Therefore, hypothesis H2 was developed as follows:

H2: Workload affects work stress.

3. The Effect of Work Fatigue on Productivity

Previous research has shown that there is an influence between work fatigue and employee work productivity (Verawati, 2016). The results of this study indicate that work productivity is not following the target due to work fatigue in the workforce itself. Physical and mental fatigue are the main factors that cause fatigue conditions that result in a decrease in work productivity in carrying out their duties. The higher the level of physical and mental fatigue of a person, the more likely productivity will decrease. The results of Saefullah & Amalia (2017) research prove that there is an influence between workload on employee work productivity.

Therefore, hypothesis H3 was developed as follows:

H3: Work fatigue affects productivity.

4. The Effect of Work Stress on Productivity

Productivity is a mental attitude that always tries and has the view that a life today is better than yesterday and today is better than before (Sunyoto, 2015). Hence, work productivity is a measurement that shows the considerations between the inputs and outputs issued by the company and the role of the workforce at that time. Job stress can cause a person to be in an emotional and tense state so that he/she cannot think properly and effectively because his rational and reasoning abilities do not function properly and normally (Datunsolang, et al., 2016). The results show that work stress has a relationship with productivity (Astuti, 2017). This means that if the employee's work stress increases, the productivity of the resulting employee will also decrease.

Therefore, hypothesis H4 was developed as follows:

H4: Work stress affects productivity.

5. The Effect of Workload on Productivity

A person's workload has been set in the form of company work standards according to the type of work (Saefullah & Amalia, 2017). A workload that is too heavy or light will have an impact on work inefficiency. Companies must assess the number of employees more compared with the same productivity or with the number of fewer employees yet can cause physical and physiological fatigue for employees. The results of Samrin's research (2018) show that workload harms employee productivity, which means that the higher the workload, the lower productivity. The workload is the extent to which individual workers are needed in completing the tasks assigned to them, identified by the number of workers they do. Excessive workloads can cause collisions or pressures that occur to these employees and can reduce employee productivity.

Therefore, hypothesis H5 was developed as follows:

H5: Workload affects productivity.

6. The Effect of Workload on Productivity mediated through Work Fatigue

Research conducted by Nur Ulfa et al. (2013) concluded that the workload carried out had a significant effect on work fatigue and this had an impact on the productivity to be achieved. The results of research by Hariyono et al. (2009) state that workload has a relationship with productivity and work fatigue has a relationship with the workload given.

Therefore, hypothesis H6 was developed as follows:

H6: Workload affects productivity mediated through work fatigue.

7. The Effect of Workload on Productivity mediated through Work Stress

Another factor that can determine whether employees have work productivity or not can also be influenced by workload. The results of Adhani's research (2013) state that workload is a collection or number of activities that must be completed by an organizational unit or position holder within a certain period. This can affect one's work productivity. Based on research conducted by Pajar (2018), the results show that workload has an effect on work productivity and work motivation has a mediating effect on work stress. Meanwhile, work stress affects work productivity and work motivation. Research conducted by Solihin (2014) states that work motivation mediates the effect of work stress on work productivity.

Therefore, hypothesis H7 was developed as follows:

H7: Workload affects productivity mediated through work stress.

METHODOLOGY

The method of this study is quantitative and will be conducted for the employees at the PT. Karya Tunggal Properti, an Indonesian state-owned company. The population of this study is all 113 employees at the PT. Karya Tunggal Properti. This research will use a saturated sampling method. Thus, all 113 employees will be taken as samples.

Data collection will be done using a 5 Likert scale questionnaire. This research will be tested for validity, reliability, and path analysis using the SPSS software and the results will also be analyzed using the same software (Sugiyono, 2019).

CONCLUSION

This paper aims to develop a conceptual model to investigate the effects of workload on productivity by using work fatigue and work stress as intervening or mediator variables. This conceptual paper consists of a research background, literature review, conceptual model, hypotheses, and research methodology of the employee productivity problem at the PT. Karya Tunggal Properti in Indonesia. The implementation of this paper can provide information about the relationship between workload on productivity by using work fatigue and work stress as mediators.

REFERENCES

- [1] Adhani, A. R. (2013). *Pengaruh Kebutuhan Aktualisasi Diri dan Beban Kerja terhadap Prestasi Kerja Karyawan*. Jurnal Ilmu Manajemen, 1(4), 1223–1233.
- [2] Ambarwati, R. F. (2014). *Konsep Kebutuhan Dasar Manusia*. Yogyakarta: Dua Satria Offset.
- [3] Astuti, A. (2017). *Hubungan Stres Kerja terhadap Produktivitas Kerja Pegawai di Kantor Dinas Kebersihan dan Pertanaman Kota Samarinda*. Portal Karya Ilmiah, FISIP Universitas Mulawarman.
- [4] Datunsolang M. (2016). *Hubungan Antara Stres Kerja Dan Beban Kerja Dengan Produktivitas Kerja Pada Pekerja Di PT. Colombus Dan Electronic Dan Furniture Kota Kotamobagu*. (Online) <https://ejournalhealth.com/pdf> Diakses 30 November 2018.
- [5] Dewi, F. (2012). Hubungan beban kerja dan lama masa kerja dengan stres pada perawat di ruang perawatan 2 RSUD RA Basuni Gedeg Mojokerto. *Journal Medica Majapahit*, 4 (1). Diunduh 18 Juli 2018 dari (<http://ejournalp2m.stikesmajapahitmojokerto.ac.id/index.php/MM/articled/view/46>)
- [6] Dhini, R. D. (2010). Pengaruh Stres kerja, Beban kerja terhadap Kepuasan kerja. Universitas Muria Kudus. Jurnal Psikologi.
- [7] Handoko, T. H. (2011). *Manajemen Personalia dan Sumberdaya Manusia*. Yogyakarta: Penerbit BPFE.
- [8] Hariyati, M. (2011). *Pengaruh beban kerja terhadap kelelahan kerja pada pekerja linting manual di PT. Djitoe Indonesia Tobacco Surakarta*. Thesis. Universitas Sebelas Maret Surakarta.
- [9] Haryanti, Faridah, A. & Puji, P. (2013). Hubungan antara beban kerja dengan stres kerja Perawat di Instalasi Gawat Darurat RSUD Kabupaten Semarang. *Jurnal Manajemen Keperawatan*, 1(1), 48-56. Diunduh 21 Februari 2017 dari (<http://jurnal.unimus.ac.id/index.php/JMK/article/download/949/1001>).
- [10] Hariyono, W., Suryani, D., & Wulandari, Y. (2009). Hubungan Antara Beban Kerja, Stres Kerja, dan Tingkat Konflik dengan Kelelahan Kerja Perawat di Rumah Sakit Islam Yogyakarta PDHI Kota Yogyakarta. *Jurnal Online Fakultas Kesehatan Masyarakat*. Universitas Ahmad Dahlan: Yogyakarta
- [11] Hasibuan, M.S.P. (1999). *Organisasi & Motivasi. Dasar Peningkatan Produktivitas*. Jakarta: Bumi Aksara.
- [12] Hasibuan, M.S.P. (2014). *Manajemen Sumber Daya Manusia*, edisi revisi, Cetakan keempatbelas, Jakarta, Penerbit : Bumi Aksara.
- [13] Hendrayanti, E. (2010). *Analisis beban kerja sebagai dasar perencanaan kebutuhan SDM*. Jurnal LPPM: PARADIGMA.
- [14] Pajar, Siti & Heru (2018). *Menejemen sumber Daya Manusia*. Yogyakarta: UP STIM YKPN.
- [15] Pongantung, M., Kapantouw, N. H., & Paul A.T Kawatu, P. A. T. (2018). Hubungan Antara Beban Kerja dan Stres Kerja dengan Kelelahan Kerja pada Perawat Rumah Sakit GMIM Kalooran Amurang. *Jurnal KESMAS*, Vol. 7 No. 5.
- [16] Prihatini. (2008). *Analisis Hubungan Bebab Kerja Dengan Stress Kerja Perawat di Setiap Ruang Rawat Inap RSUD Sidikalang*. Skripsi Universitas Sumatera Utara Medan.
- [17] Rivai. V Z. (2015). *Manajemen Sumber Daya Manusia Untuk Perusahaan* . Edisike-7. Depok: PT RAJAGRAFINDO.
- [18] Robbins, S.P. (2007). *Behavior Organization* . Jakarta: Salemba Empat.
- [19] Robbins, S. P. & Judge, T.A. (2014). *Perilaku Organisasi (Organizational Behavior)*. Edisi 12. Jakarta: Salemba Empat.
- [20] Robbins, S. P. & Judge, T.A. (2017). *Perilaku Organisasi*. Jakarta: Salemba Empat.
- [21] Saefulloh, E. & Amalia, A.N. (2017). Pengaruh Beban Kerja dan Stres Kerja Terhadap Produktivitas Kerja Karyawan. *Jurnal Akademika*, Vol 15 (2), 117-122.
- [22] Samrin (2018). Hubungan Beban Kerja dan Mutasi terhadap Produktivitas Karyawan pada PT. PLN (Persero) Wilayah Sumatera Utara. *JURNAL PEMBANGUNAN PERKOTAAN*, 6(1), 18-23.
- [23] Sedarmayanti (2011). *Tata Kerja dan Produktivitas Kerja : Suatu Tinjauan Dari Aspek Ergonomi Atau Kaitan Antara Manusia Dengan Lingkungan Kerjanya*. Cetakan Ketiga. Bandung: Mandar Maju.
- [24] Setiawati, L..K.M., (2011). *Selintas tentang kelelahan kerja*, Yogyakarta: Amara Books.

- [25] Siagian S, P. (2014). *Manajemen Sumber Daya Manusia*. Jakarta : Bumi Aksara.
- [26] Soedirman & Suma'mur, P.K. (2014). *Kesehatan Kerja dalam Prespektif Hiperkes dan Keselamatan Kerja*. Jakarta: Erlangga.
- [27] Soleman, A. (2011). *Analisis Beban Kerja Ditinjau Dari Faktor Usia Dengan Pendekatan Recommended Wight Limit*. Universitas Pattimura, Ambon.
- [28] Suma'mur, P.K. (2014). *Higiene Perusahaan dan Kesehatan Kerja*. Jakarta: Sagung Seto.
- [29] Sunyoto, D. (2012). *Manajemen Sumber Daya Manusia*. Jakarta: PT Buku.
- [30] Suparno, E.W. (2015). *Manajemen Pengembangan Sumber Daya Manusia*. Yogyakarta: Pustaka Pelajar.
- [31] Sutrisno, E. (2015). *Manajemen Sumber Daya Manusia*. Jakarta : Kencana.
- [32] Tarwaka. (2014). *Ergonomi industry*. Surakarta : Harapan Press Yogyakarta
- [33] Ulfa, N., Nurcahyo, P.J., Dwiandhono, I. (2013). Model Kuantitatif Manajemen Kelelahan dan Beban Kerja untuk Peningkatan Produktivitas Pekerja Penggilingan Padi. *Kesmas: Jurnal Kesehatan Masyarakat Nasional (National Public Health Journal)*.
- [34] Verawati, L. (2016). Hubungan Tingkat Kelelahan Subyektif dengan produktifitas pada tenaga kerja bagian Pengemasan di CV Sumber Barokah. *The Indonesian Journal of Ocupational Safety and Health*, Vol. 5 (No.1).

