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Analysis of the Impact on Compensation Satisfaction, Overcommitment, and Sleep Quality as Mediating Factor Against Mental Health Condition of Construction Worker in Indonesia

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Abstract: This study investigates the relationship between compensation satisfaction, overcommitment, and sleep quality as mediating variable on the mental health of construction workers in Indonesia. The research utilizes a quantitative approach with data collected from 182 respondents through surveys conducted using a cross-sectional method. The questionnaire utilized Likert scales to measure compensation satisfaction, overcommitment, sleep quality, and mental health. The collected data were analyzed using SPSS software for descriptive analysis and multiple linear regression. The findings reveal that compensation satisfaction positively impacts mental health, while overcommitment has a negative effect, contributing to mental health deterioration. Additionally, sleep quality is found to play a mediating role, mitigating the adverse effects of overcommitment on mental health. The study highlights the significance of fair compensation and work-life balance in improving the mental health of construction workers. These insights are essential for developing management policies aimed at enhancing employee well-being in the construction sector. The research contributes to understanding the complex interplay between compensation, work stress, and mental health, with implications for both workers and employers in Indonesia's construction industry.

Keyword: Compensation Satisfaction, Overcommitment, Sleep Quality, Mental Health.

INTRODUCTION

The construction sector in Indonesia has experienced exponential growth for the last decades, driven by rapid urbanization, infrastructure development, and economic growth (Badan Pusat Statistik, 2023). Such growths have placed the position of construction workers as necessary parts that contributed towards the nation's infrastructure development. On the other hand, the quality of the working environment in the construction sector was less than

ideal identified by the limited time to complete the jobs, heavy physical activities, and high risk of work accidents due to lack of attention to workplace safety factors (Sato, et al., 2020). Those matters might have an impact on the mental health of the construction worker (Aghimien et al., 2022).

Compensation was considered a necessary factor to improve the satisfaction of working and commitment of employees in various sectors including construction. The intended compensation are defined as compensation and benefits received by workers. Compensation is used as an instrument to determine policy to improve workers' health. (Leigh et al., 2019). Adequate compensation and compliance with employment laws and regulations could significantly reduce the level of stress and financial burden, therefore it might have a positive impact on the mental health of workers (Kuroki, 2021).

Effort-Reward Imbalance (ERI) is a theoretical model associated with the level of work stress and the mental health of its workers (Rugulies et al., 2017). An overcommitment trait often showed by working overtime and unable to stop working on time which was repeatedly carried out for seeking self-validation or external validation (Siegrist et al., 2004). According to Siegrist study in 2004 and 2016, overcommitment could be interpreted as a maladaptive response to high working demand giving rise to overworked employees, either in terms of time or effort, especially if the compensation provided might not be able to compensate work contributions delivered. Overcommitment could also negatively impact overall sleep quality (Afonso, 2017).

Sleeping is an important activity to produce a quality and productive brain and mental health (Baglioni et al., 2016). Some studies showed strong associations between mental health and quality of sleep. For example, according to survey data of HILDA (Duncan et al., 2022), it was discovered that individuals above the age of 18 who were suffering from insomnia tended to have worse mental health levels compared to individuals who were not. The research result of Baglioni also indicated that the respondent's mood was better and generally happier when the respondent had a better quality of sleep. Wang et al. (2021) also stated that sleep quality could mediate the relationship between coping style and mental health. This research will further examine whether the variable of sleep quality could mediate the relationship between overcommitment and mental health.

Based on a study by Shkembi et al. (2023), indicated that the lower compensation value of workers in various industries had a direct connection with the worsening mental health condition of the workers in their respective industrial sectors. This indication occurred due to many imbalances between workload and compensation satisfaction received by such employees. Blue-collar workers frequently received insufficient wages if compared with the Regional Minimum Wages amount that should be received by workers in their working area. (Ramadhan & Fifi, 2020) The workers also had little to none bargaining position, thus they often had to take the job offer even though the compensation value was below par. In addition, they also often did not receive any additional allowances such as health insurance, occupational accident insurance in the form of Manpower BPJS, and any other basic allowances such as religious holiday allowances, overtime allowances, and so on (Rosfadhila, 2019). In high-risk jobs such as construction sectors, it is important for the worker for have their basic rights fulfilled for their welfare and safety in high-risk working environments. However, a study by Li et al., (2022) examined whether the compensation increases would linearly impact the quality of the workers' mental health. It was found that there was a nonlinear relationship effect between compensation increases and allowance towards the workers' mental health. To the workers with low compensation, there was a positive relationship between compensation increases and mental health improvement, yet for middleup workers level, there was a changing of correlation whereas in conjunction with any compensation increases, at a certain point the worsening of the workers' mental health

condition happened instead. Average people with their level of education background who were living in big cities also experienced worsening mental health conditions where it was in conjunction with compensation increases received. This was possible due to increasing loads of responsibilities in conjunction with compensation increases they have received.

Other than the compensation satisfaction factor, the overcommitment factor was also believed to affect the mental health condition of workers. Stress conditions due to highpressure working environment is a result arising from a demanding situation at the workplace and fear of failure to fulfill the expectations which often could provoke a series of intense negative emotions and physiological responses (Bardhan, et al., 2019). On workerspopulation, the ERI model using overcommitment component has been successfully implemented to find out reasons for mental health issues (Hinsch et al., 2019). The empirical study results stated that there was a relationship between overcommitment and the increasing of mental health deterioration risk of workers. However, there was some research evidence showing inconsistent relationships based on the biological sciences perspective associating ERI and overcommitment towards someone's mental health (Siegrist et al., 2016). Upon such differences in findings, the relationship between overcommitment and mental health, particularly among workers in construction sectors in Indonesia, should be examined further.

On sleep quality variable, there are some studies associating a relationship between overcommitment and sleep quality disorder. According to studies in 31 countries in Europe by Mai et al. (2019) stated that there were increasing risks of sleep disorder rate to 47% when the job pressure was higher, thus resulting in the rise of overcommitment. Other similar study by Premji (2017) also stated that the increasing level of sleep disorders due to overcommitment in the working environment would lead to worsening mental health quality. In addition, sleep quality had a mediating effect between overcommitment at a certain working environment and mental health based on a study of particular workers' sample in Australia, where even though they had an adequate duration of sleep – however if the quality of sleep was poor, it would increase the risk of mental health's worsening of someone (Jaydarifard, 2023). This will be further used as a basis to in this research to further examine the mediating effect of sleep quality upon overcommitment towards the mental health condition of construction workers in Indonesia.

Based on the previous researches it have been identified that there were inconsistent results that could be caused by differences in the measurement method, data availability, and countries characteristics such as culture and market of the workers (Bai dan Veall, 2023). In Indonesia, studies on the relationship between compensation and overcommitment impact on mental health in construction sectors has not been performed. Thus, this research will contribute to finding out whether compensation satisfaction, overcommitment, and sleep quality will affect the mental health of construction workers in Indonesia. Furthermore, upon the description of some previous research, there were not many studies examining the effect of long-term overcommitment towards the mental health of construction workers using sleep quality as a mediating variable. Wang et al. (2021) on their research stated that quality of sleep could mediate as well as strengthen the relationship between coping style and mental health. The studies of sleep quality as a mediating variable has been rarely carried out, particularly in Indonesia, hence it was required further research on the role of sleep quality as a mediating variable towards mental health.

This research aimed to analyze the relationship between compensation satisfaction and overcommitment towards the mental health of construction workers in Indonesia, the relationship between overcommitment and sleep quality of construction workers in Indonesia, and sleep quality as a variable that mediates the relationship between overcommitment and mental health of construction workers in Indonesia. The described research questions of this research are:

- 1. Is there any positive relationship between compensation satisfaction and mental health of workers in the construction sector in Indonesia?
- 2. Is there any negative relationship between overcommitment and mental health of workers in the construction sector in Indonesia?
- 3. Is there any negative relationship between overcommitment and sleep quality amongst workers in the construction sectors in Indonesia?
- 4. Is there any relationship between overcommitment through sleep quality and mental health workers in the construction sectors in Indonesia?

METHOD

This research is quantitative research using a data collection method through a survey from the individual sample, namely construction workers with determined criteria. The survey is carried out by cross-sectional method with estimated implementation in January-February 2024. The researcher has no control over variables in this research, hence the manipulation in this research is minimal. This research is a non-contrived study research that takes place in the natural environment.

The construction industry in Indonesia was estimated to have numbers of workers of 8.5 million in 2022 (BPS, 2023) to support infrastructure development programs. In determining the sample of the research, there are two criterias used to determine the research samples. Firstly, workers with an age interval of 25-45 years old for infrastructure projects (such as roads, ports, airports, bridges, and so on other than buildings) are assigned in any Indonesia's infrastructure projects. Secondly, based on educational background, the worker is classified into 3 (three) categories, namely unskilled (Elementary School/Junior High (Senior High School/Vocational School), School), Skilled High and Expert (Diploma/Bachelor Degree). Based on the described sample model, the sampling method in this research is non-probability sampling with a purposive sampling method. The population in this research is N > 10,000, and the total sample is determined based on a formula of Hair et al. (2010), namely N = (5 - 10 x total indicator). In this research, there are 35 indicators, so the total of the minimum sample will be 175 respondents.

In conducting the survey, the researcher composed the list of questions elaborated in the questionnaire measured by using a four-point Likert scale to be responded to by the respondent. The questionnaire was disseminated in two ways, the first dissemination was by printing the questionnaire to be distributed directly to the respondents, and the other one was through electronic questionnaires. The researcher chose to combine these two ways of distribution due to the consideration of lack of access and literature for some respondents if the researcher only relied on electronic questionnaires. The questionnaire was distributed through electronic questionnaires using Google form and distributed through electronic media such as WhatsApp and electronic mail. In measuring the compensation satisfaction, the used method shall refer to sub-scale pay of Job Satisfaction Survey items 1, 10, 19, and 28 (Spector, 1994) with a measurement scale 1 - 4 (1 = "strongly disagree" and 4 = "strongly agree"). Later, mental health was measured by the GHQ-12 Survey, in which the questionnaire was in the form of several questions that represented the condition of workers' mental health (David et al., 1997) with a measurement scale of 1 - 4 (1 = "strongly disagree" and 4 = "strongly agree"). To measure Overcommitment, the Effort-Reward Imbalance Survey sub-scale overcommitment with a measurement scale of 1 - 4 (1 = "strongly" disagree" and 4 = "strongly agree"). To measure the level of sleep quality would use the method referred to The Pittsburgh Sleep Quality Index (PSQI), namely a questionnaire with questions that indicate an individual's condition during sleep process. This questioner measured with measurement scale 0 - 3 (0 = "best", 1 = "good", 2 = "bad", 3 = "worst").

The collected data would be processed and analyzed with descriptive method and multiple linear regression by using SPSS. The descriptive analysis shall measure and provide an overview and data distribution related to respondents in the research. In this research, classic assumption testing is applied to all variables as a prerequisite in the regression model. The analysis of multiple linear regression has an objective to discover the relation between all those independent variables, namely compensation satisfaction, overcommitment, and sleep quality toward the dependent variable namely the worker's mental health, and to discover the relation between overcommitment toward the worker's mental health with sleep quality as a mediating variable. This research shows that the regression model is declared feasible to be used if the significance value (p value) < 0.05. Later, the value of R² will be analyzed to show the extent of the effect of the independent and mediating variables on the dependent variable. The final stage is to analyze the significance value (p value < 0.05) and β value on the correlation table to prove whether hypotheses 1 – 4 would be accepted.

Mental health is a state of mental well-being, and not a result of the mental illness absence (WHO, 2022). Even though there are alternative definitions of mental health concepts, mental health is a comprehensive concept and can be medically evaluated by using certain approaches (Anjara et al., 2020). Mental health could be affected by several factors, such as lifestyle, social support, socio-economic condition, stress, and stress condition (Nagasu and Yamamoto, 2020). Stress could also have a direct impact on mental health conditions and one of the triggers is low socio-economic condition (Herbison et al., 2017). One socio-economic metric that could be measured is in the form of regular income or compensation. Subramanian & Kawachi (2006) defined a linear relationship between the decreasing of income in form of compensation and decreases in mental health. Surrounding communities living near poverty line are commonly known to have a poorer mental health condition. On the other hand, in some circumstances income increases in the form of compensation had a positive impact on someone's mental health condition subject to a certain threshold (Dang et al., 2019; Wickham et al., 2019). These matters are consistent with the research results of Reiss (2013) and Mackenbach (2020) where there were no consistent causal relationship found between the increasing income of workers and improvement of someone's mental health condition.

Due to the unequal distribution of wealth towards countries in the world, the correlation between income and mental health conditions may be different in various countries including in Indonesia. In China where the country is described as a developing country from economic aspect, the increasing income of its citizen is often followed by a heavier workload and stress levels which also impacted the mental health condition of its citizen (Wang and Granados, 2019). Conversely, in developed countries like Germany, studies such as the Gutenberg Health Study have found a positive correlation between lower income and poorer mental health, although some longitudinal studies report no significant link between income and mental illness (Reche et al., 2021). Indonesia is also a developing country with slower economic growth compared to China, compounded by persistent poverty issues that contribute to widespread mental health problems (Tampubolon and Hanandita, 2014). Almost 7% of the population in Indonesia (WHO, 2021) are experiencing mental health issue which was also paradoxically affecting the decreasing of productivity (Bir & Frank, 2001) and decreasing of income (Lund et al., 2011) which might also implicating towards a slowing of economic growth. According to the arguments, this research proposes a hypothesis stating that compensation satisfaction has a positive effect toward the mental health of workers in the construction sector in Indonesia (Hypothesis 1).

Overcommitment was introduced by Siegrist (1996) on the Effort-Reward Imbalance (ERI) model to describe why someone would carry out a disproportional effort toward fair compensation at their workplace. Overcommitment describes workers with a certain

motivational pattern that makes them work too hard and feel inseparable from their work. These workers often struggle with distorted perceptions of work demands and feel inseparable from their jobs, leading to excessive efforts beyond normal workloads (Siegrist, 2004). The perception's distortion would elaborate on how much workers are experiencing difficulties in measuring balance between what they are getting against efforts put into work, exposing their vulnerabilities toward exhaustion and other issues related to health including mental health (Siegrist, 2008). Overcommitment also showed a strong relationship between getting tired easily of a worker and poor welfare of a worker (Bakker et al., 2000). A study among students in Italy universities indicated that strong effort, low compensation, and overcommitment had a positive relationship against the decreasing quality of the mental health of students, primarily for the female students (Porru et al., 2021). Park et al. (2020) also conducted research related to the negative impact of overcommitment that generally became work culture in Korea. The research's result indicated that overcommitment affected the increase of stress, depression, and suicidal tendencies in young workers aged between 20 to 35 years old. Another study was carried out in Japan by Sato et al. (2020) with the findings where overcommitment had a positive relationship with the decreasing of workers' mental health in manufacturing sectors in Japan, where working overtime also became a culture for workers in Japan. Based on such studies and references, this research proposes hypothesis stating that overcommitment has a negative relationship towards the mental health of workers in construction sectors in Indonesia (Hypothesis 2).

Sleeping is a periodic state that must be regularly done in the assigned time by the human body and mind to recover its physical and mental health (Pinto et al., 2018). The study performed by Ohayon (2011) stated that on average, one-third of the general population experiences poor quality of sleep, marked by experiences such as sleep disorders that caused a decrease in sleep duration. One of the indicators of systemic consequences of decreasing sleep quality was there was a relationship toward the worsening of mental health quality (Alvaro et al., 2013), where the case of inverse relationship was also found where the worsening condition of mental health could cause in decreasing sleep quality (McCrae and Lichstein, 2001). A longitudinal study in China carried out by Zou et al. (2020) indicated a stronger association between decreasing sleep quality and decreasing of mental health and the relationship per se is bidirectional in nature whereas the other studies were usually based on cross-sectional time periods. This strong association may potentially become an endless vicious cycle of mental health worsening and would further complicate efforts to cure mental health conditions in the future (Gregory et al., 2009). According to those studies, there was indeed a strong association between poor quality of sleep and mental health quality, however, until now there were found no direct causal relationship that successfully prove a positive relationship between decreasing of sleep quality and mental health state (Scott et al., 2021). While on overcommitment at the workplace, there was a study associating overcommitment and the decreasing sleep quality (Akerstedt, 2006). Overcommitment at the workplace was indicated as one of the factors that caused the decreasing of sleep quality (Fischer et al., 1997), where overcommitment was caused by the high workload, the burden of employees to take on multiple responsibilities in their working environment, and inability of management's board to distribute and delegate workload equally (Akerstedt et al., 2002). Based on such arguments, this research proposes a hypothesis stating that overcommitment has a negative relationship towards the sleep quality of workers in the construction sectors in Indonesia (Hypothesis 3).

A study in China by Wang et al. (2021), conducted longitudinally from 2004 and reanalyzed in 2015, indicated that sleep quality is a variable that can mediate the relationship between coping style and mental health. For the study result in 2015, the role of sleep quality in mediating coping style against mental health was stronger compared to the study held in

2004. The other latest study carried out by Jaydarifard et al. (2023) examined the relationship between precarious employment which was the main reason for overcommitment against the worsening condition of someone's mental health, which was mediated by sleep quality. According to him, sleep quality was a variation that could be intervened and modified to cure someone's mental health. The research's result with a sample of the workers population in Australia indicated that sleep quality could positively mediate the relationship between precarious employment and the workers' mental health. Based on the references of previous studies, there is an additional hypothesis in this research stating that **sleep quality can mediate the relationship between overcommitment and the mental health of construction workers in Indonesia (Hypothesis 4).**



Figure 1. Conceptual framework

RESULTS AND DISCUSSION

In this research, we have obtained 182 respondents to be used as samples. Out of the total respondents, there are 100 male respondents and 82 female respondents. Further, we have found that 158 persons have bachelor's degrees, 9 persons have diploma degrees, and 15 persons with high school graduates.

Table 1. Validity Test Result						
No	Variable	Percent	Information			
1	Pay Satisfaction (PS)	100%	Valid			
2	Sleep Quality (SQ)	100%	Valid			
3	Overcommitment (OC)	100%	Valid			
4	Mental Health (MH)	100%	Valid			
	Correct data much					

Source: data processed by researchers

Derived from the SPPS output for the classic assumption test, it comes up with the result as follows: Table 2 Classic Assumption Test Pecult

	Table 2. Classic Assumption Test Result								
	No	Variable	Skewness Value	Information					
	1	Pay Satisfaction (PS)	-0.185	Normally Distributed					
	2	Sleep Quality (SQ)	-0.247	Normally Distributed					
	3	Overcommitment (OC)	-0.048	Normally Distributed					
_	4	Mental Health (MH)	-0.384	Normally Distributed					
_									

Source: data processed by researchers

When the Skewness value is analyzed, it can be said that the data is normally distributed if the value falls within the range of -1 to 1. The data above shows values within this range, so it can be concluded that all variables are normally distributed.

No	No Variable Kolmogorov-Smirnov							
		Stat	df	Sig.				
1	Pay Satisfaction (PS)	-0.185	182	0.000				
2	Sleep Quality (SQ)	-0.247	182	0.044				
3	Overcommitment (OC)	-0.048	182	0.000				
4	Mental Health (MH)	-0.384	182	0.000				

Source: data processed by researchers

From the above table of Test of Normality in the Kolmogrov-Smirnov section, the normal distribution value of each variable can be analyzed by looking at the Sig column. The number for each variable shows p value < 0.05, which means that all the data have been distributed normally.





The above chart shows that the histogram resembles a bell shape or normal curve. It shows that the data have been distributed normally, so it fulfills the normality assumption.





The above Normal P-P Plot Chart shows that the distribution of the standardized residual value is quite close to the regression line area, so the homoscedasticity assumption is fulfilled.

	Table 4. Correlations Test Result								
No	Description	Variable	MH	PS	SQ	OC			
1	Pearson Correlation	MH	1.000	0.232	0.303	-0.483			
2	Sleep Quality (SQ)	PS	0.232	1.000	0.235	-0.199			
3	Overcommitment (OC)	SQ	0.303	0.235	1.000	-0.356			
4	Mental Health (MH)	OC	-0.483	-0.199	-0.356	1.000			

Source: data processed by researchers

	Table 5. Coefficients Test Result ^a								
Variable	Unstand	lardized	Standardized			Collinea	rity		
	Coeff	icients	Coefficients			Statisti	ics		
	В	Std.	Beta	t	Sig.	Tolerance	VIF		
		Error							
(Constant)	3.378	0.224		15.061	0.000				
PS	0.073	0.040	0.120	1.802	0.073	0.930	1.076		
SQ	0.088	0.049	0.127	1.820	0.070	0.845	1.183		
OC	-0.344	0.057	-0.414	-5.978	0.000	0.860	1.163		

In the table of Correlation, the value of Pearson Correlations obtained is <0.7.

a. Dependent Variable: MH Source: data processed by researchers

In the table of Coefficient, the value of VIF obtained is <5. According to the above, it could be concluded that there is no issue of multicollinearity amongst variables.

Table 6. ANOVA ^a								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	4.470	3	1.490	21.527	0.000^{b}		
	Residual	12.321	178	0.069				
	Total	16.791	181					

a. Dependent Variable: MH

b. Predictors: (Constant), OC, PS, SQ

Source: data processed by researchers

Table 7. Model Summaryb								
Model	R	R Square	Adjusted Square	Std. Error of the Estimate				
1	0.516 ^a	0.266	0.254	0.263093				
		a. De	ependent Variable: MH					
		b. Predict	ors: (Constant), OC, PS, S	0				

Source: data processed by researchers

From those two tables above, it could be concluded that the model is worth examining since the model has a significance of <0.005. Later, the value of R Square, according to opinion of Hair et al (2018), its value is in the low category, namely Mental Health could be described by Compensation Satisfaction, Overcommitment, and Sleep Quality, in the amount of 26.6% in this regression model.

Analysis Result of Multiple Linear Regression H1 Hypothesis Testing

Table 8. ANOVA ^a								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	0.904	1	0.904	10.244	0.002 ^b		
	Residual	15.889	180	0.088				
	Total	16.791	181					
	o Domondont Variable, MI							

a. Dependent Variable: MH b. Predictors: (Constant), PS

Source: data processed by researchers

In this regression model, the ANOVA table shows a significance value of 0.002. The value fulfills the criteria of the model feasibility test, namely, significance is <0.05, so it could be concluded that the regression model is feasible or a good fit.

Table 9. Model Summary ^b								
Model	R	R Square	Adjusted Square	Std. Error of the Estimate				
1	0.232 ^a	0.054	0.049	0.297087				
		a. De	ependent Variable: MH					
		b. Pre	edictors: (Constant), PS					
	Source: data processed by researchers							

The value of Adjusted R Square is 0.054 or 5.4%. According to Hair et al (2018), the value shows the capability of Compensation Satisfaction in predicting the variability of Mental Health is low.

Table 10. Coefficients Test Result ^a									
Model	Variable	Unstandardized Coefficients		Standardized Coefficients					
		В	Std. Error	Beta	t	Sig.			
1	(Constant)	2.562	0.112		22.795	0.000			
	PS	0.141	0.044	0.232	3.201	0.002			

a. Dependent Variable: MH

Source: data processed by researchers

Based on the table of Coefficient above, the p value is < 0.05, and the beta value of correlation PS toward MH is positive 0.141. This shows that Compensation Satisfaction has a significant and positive effect on Mental Health, hence the H1 hypothesis is accepted, and the obtained regression model is as follows:

MH = 2.562 + 0.141PS

	Table 11. ANOVA ^a								
Model		Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	3.917	1	3.917	54.764	0.000 ^b			
	Residual	12.874	180	0.072					
	Total	16.791	181						

H2 Hypothesis Testing

a. Dependent Variable: MH b. Predictors: (Constant), OC

Source: data processed by researchers

In this regression model, the ANOVA table shows a significance value of 0.000. The value fulfills the criteria of the model feasibility test, namely, significance is <0.05, so it could be concluded that the regression model is feasible or a good fit.

Table 12. Model Summary ^b								
Model	R	R Square	Adjusted Square	Std. Error of the Estimate				
1	0.483 ^a	0.233	0.229	0.267438				
		a. D	ependent Variable: MH					
	b. Predictors: (Constant), OC							
		Source: d	lata processed by researche	rs				

The value of Adjusted R Square is 0.233 or 23.3%. According to Hair et al (2017), the value shows the capability of Overcommitment in predicting the variability of Mental Health is low.

Table 13. Coefficients Test Result ^a								
Model	Variable	Unstandardized Coefficients		Standardized Coefficients				
		В	Std. Error	Beta	t	Sig.		
1	(Constant)	3.890	0.133		29.190	0.000		
	OC	-0.401	0.054	0.483	-7.400	0.000		

a. Dependent Variable: MH

Source: data processed by researchers

Based on the table of Coefficient above, the p value < 0.05, and the beta value of correlation OC toward MH is negative - 0.401. This shows that Overcommitment (OC) has a significant and negative impact on Mental Health, hence the H2 hypothesis is accepted, and the obtained regression model is as follows:

MH = 3.890 - 0.401OC

H3 Hypothesis Testing

Table 14. ANOVA ^a								
Model	el Sum of Squares df Mean Square F Sig.							
1	Regression	4.401	1	4.401	26.053	0.000^{b}		
	Residual	30.408	180	0.169				
	Total	34.810	181					

a. Dependent Variable: SQb. Predictors: (Constant), OCSource: data processed by researchers

In this regression model, the ANOVA table shows a significance value of 0.000. The value fulfills the criteria of the model feasibility test, namely, significance is <0.05, so it could be concluded that the regression model is feasible or a good fit.

Table 15. Model Summaryb							
Model	R	R Square	Adjusted Square	Std. Error of the Estimate			
1	0.356 ^a	0.126	0.122	0.411018			
		a. D	Dependent Variable: SQ				
b. Predictors: (Constant), OC							
		Source: d	lata processed by researche	rs			

The value of Adjusted R Square is 0.122 or 12.2%. According to Hair et al (2017), the value shows the capability of OC in predicting the variability of SQ is low.

Table 16. Coefficients Test Result ^a								
Model	Variable Unstandardized Standardized							
		Coefficients		Coefficients				
		В	Std. Error	Beta	t	Sig.		
1	(Constant)	3.186	0.205		15.553	0.000		
	OC	-0.425	0.083	-0.356	-5.104	0.000		

a. Dependent Variable: SQ

Source: data processed by researchers

Based on the table of Coefficient above, the p value < 0.05, and the beta value of correlation OC toward SQ is negative - 0.425. This shows that Overcommitment (OC) has a significant and negative impact on Sleep Quality, hence the **H3 hypothesis is accepted**, and the obtained regression model is as follows:

SQ = 3.186 - 0.425OC

H4 Hypothesis Testing

Table 17. ANOVA ^a							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	1.537	1	1.537	18.130	0.000 ^b	
	Residual	15.255	180	0.085			
	Total	16.791	181				
		a. Depe	ndent Varia	able: MH			

b. Predictors: (Constant), SQ

Source: data processed by researchers

In this regression model, the ANOVA table shows a significance value of 0.000. The value fulfills the criteria of the model feasibility test, namely, significance is <0.05, so it could be concluded that the regression model is feasible or a good fit.

Table 18. Model Summary ^b								
Model	R	R Square	Adjusted Square	Std. Error of the Estimate				
1	0.303 ^a	0.092	0.086	0.291114				
		a. D	ependent Variable: MH					
b. Predictors: (Constant), SQ								
Source: data processed by researchers								

The value of Adjusted R Square is 0.086 or 8.6%. According to Hair et al (2017), the value shows the capability of SQ in predicting the variability of MH is low.

Table 19. Coefficients Test Result ^a								
Model	Variable	Unst	andardized	Standardized				
		Coefficients		Coefficients				
		В	Std. Error	Beta	t	Sig.		
1	(Constant)	2.463	0.108		22.732	0.000		
	SQ	0.210	0.049	0.303	4.258	0.000		
		a Det	pendent Variable	· MH				

Source: data processed by researchers

Based on the table of Coefficient above, the p value < 0.05, and the beta value of the correlation SQ toward MH is positive 0.210, where the values show that the correlation between SQ and MH is positive. In this case, the mediating variable (Sleep Quality) has a **Partial Mediation** role due to the direct effect on H2 showing a significant correlation, and by the time SQ is included in the model, then the correlation SQ toward MH still displays a significant correlation. Derived from the description, the **H4 Hypothesis is accepted**.

CONCLUSION

The research result shows that the compensation satisfaction may provide a positive effect to the improvement of workers' mental health, so that it confirms the previous study results (Subramanian & Kawachi, 2006; Dang et al., 2019; Wickham et al., 2019). Furthermore, overcommitment to working has a negative impact since it may worsen the condition of workers' mental health, so that it confirms the previous study results (Sato et al., 2020; Park et al., 2020; Porru et. al., 2021). Last, it could be concluded as well that the

quality of sleep has a role in mediating the relationship between overcommitment and workers' mental health. This research contributes to any factors that impact the workers' mental health namely compensation satisfaction, overcommitment and quality of sleep by using samples in Indonesia.

According to the findings and conclusions presented, several managerial implications arise from this research. First, management should regularly evaluate the company's compensation system to ensure that the compensation offered is equal to the level of work and provides adequate satisfaction to employees. Second, management need to understand the individual work capacity, provide support, and manage workloadwisely. Proper support, well-time management policy, and attention to the employee's wealth may help in minimizing the impact of overcommitment to mental health. Third, management may consider providing health programs to support quality sleep, for example, a better shift plan, a comfortable rest facility, and a work-life balance program. A program that provides adequate rest periods and better-quality sleep may have a positive impact on the worker's mental health. Last, management shall understand that a worker's mental health has a significant impact on the worker's performance and productivity. Therefore, the applied policy may consider the factors that may affect a mental health condition, such as compensation satisfaction, overcommitment, and sleep quality.

REFERENCES

- Aghimien, D., Aigbavboa, C. O., Thwala, W. D., Chileshe, N., & Dlamini, B. J. (2022). Help, I am not coping with my job! – A work-life balance strategy for the Eswatini construction industry. Engineering, Construction and Architectural Management. https://doi.org/10.1108/ecam-11-2021-1060
- Akerstedt T. (2006). Psychosocial stress and impaired sleep. Scandinavian journal of work, environment & health, 32(6), 493–501.
- Åkerstedt, T., Knutsson, A., Westerholm, P., Theorell, T., Alfredsson, L., & Kecklund, G. (2002). Sleep disturbances, work stress and work hours. Journal of Psychosomatic Research, 53(3), 741–748. <u>https://doi.org/10.1016/s0022-3999(02)00333-1</u>
- Alvaro, P. K., Roberts, R., & Harris, J. (2013). A Systematic Review Assessing Bidirectionality between Sleep Disturbances, Anxiety, and Depression. SLEEP, 36(7), 1059–1068. <u>https://doi.org/10.5665/sleep.2810</u>
- Badan Pusat Statistik. (2023). Banyaknya Tenaga Kerja Ahli Konstruksi menurut Provinsi dan Kualifikasi (Orang), 2019-2022. <u>https://www.bps.go.id/indicator/4/245/1/banyaknya-tenaga-kerja-ahli-konstruksi-</u> <u>menurut-provinsi-dan-kualifikasi.html</u>
- Baglioni, C., Battagliese, G., Feige, B., Spiegelhalder, K., Nissen, C., Voderholzer, U., Lombardo, C., & Riemann, D. (2011). Insomnia as a predictor of depression: A metaanalytic evaluation of longitudinal epidemiological studies. Journal of Affective Disorders, 135(1–3), 10–19. <u>https://doi.org/10.1016/j.jad.2011.01.011</u>
- Baglioni, C., Nanovska, S., Regen, W., Spiegelhalder, K., Feige, B., Nissen, C., Reynolds, C. F., & Riemann, D. (2016). Sleep and mental disorders: A meta-analysis of polysomnographic research. Psychological Bulletin, 142(9), 969–990. <u>https://doi.org/10.1037/bul0000053</u>
- Bai, Y., & Veall, M. R. (2023). Minimum wages and mental health: Evidence from Canada. SSM - Mental Health, 3, 100187. <u>https://doi.org/10.1016/j.ssmmh.2023.100187</u>
- Bardhan, R., Heaton, K., Davis, M. V., Chen, P., Dickinson, D. B., & Lungu, C. T. (2019). A cross sectional study evaluating psychosocial job stress and health risk in emergency department nurses. International Journal of Environmental Research and Public Health, 16(18), 3243. <u>https://doi.org/10.3390/ijerph16183243</u>

- Bir, A., & Frank, R. G. (2001). Mental illness and the labour market in developing nations. Paper prepared for WHO commission on macro-economics and health. Geneva: The World Health Organization.
- BPS. (2023). Indikator Konstruksi, Triwulanan IV-2022. Badan Pusat Statistik. Diakses pada 5 Oktober 2023 dari https://www.bps.go.id/publication/2023/05/18/0a18d6dd017b1005c31ea834/indikator -konstruksi-triwulanan-iv-2022.html
- Buysse, D. J., Reynolds, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh sleep quality index: A new instrument for psychiatric practice and research. Psychiatry Research, 28(2), 193–213. <u>https://doi.org/10.1016/0165-1781(89)90047-4</u>
- C.E. Herbison, K. Allen, M. Robinson, J. Newnham, C. Pennell, The impact of life stress on adult depression and anxiety is dependent on gender and timing of exposure, Dev. Psychopathol. 29 (4) (2017) 1443–1454, <u>https://doi.org/10.1017/s0954579417000372</u>.
- Carpi, M., & Vestri, A. (2022, December 20). The Mediating Role of Sleep Quality in the Relationship between Negative Emotional States and Health-Related Quality of Life among Italian Medical Students. International Journal of Environmental Research and Public Health, 20(1), 26. <u>https://doi.org/10.3390/ijerph20010026</u>
- Dang, H.-A. H., Lokshin, M. M., & Abanokova, K. (2019). Did the poor adapt to their circumstances? Evidence from long-run Russian panel data. Economics Bulletin, 39 (4), 2258–2274.
- Del Rio João, K. A., De Jesus, S. N., Carmo, C., & Pinto, P. (2018). The impact of sleep quality on the mental health of a non-clinical population. Sleep Medicine, 46, 69–73. https://doi.org/10.1016/j.sleep.2018.02.010
- E. Reche, H.H. K["] onig, A. Hajek, The relationship between income and morbiditylongitudinal findings from the German ageing survey, Nov 24, Int. J. Environ. Res. Publ. Health (23) (2021) 18, <u>https://doi.org/10.3390/ijerph182312365</u>.
- Goldberg, David, R. Gater, N Sartorius, T. B. Ustun, M. Piccinelli, O. Gureje and C. Rutter, "The Validity of Two Versions of the GHQ in the WHO Study of Mental Illness in General Health Care," *Psychological Medicine*, 27(1), 1997, pp. 191-197
- Green, C. P., & Heywood, J. S. (2023, October). Performance pay, work hours and employee health in the UK. *Labour Economics*, 84, 102387. https://doi.org/10.1016/j.labeco.2023.102387
- Gregory, A. M., Rijsdijk, F. V., Lau, J. Y. F., Dahl, R. E., & Eley, T. C. (2009). The direction of longitudinal associations between sleep problems and depression symptoms: a study of twins aged 8 and 10 years. SLEEP, 32(2), 189–199. <u>https://doi.org/10.1093/sleep/32.2.189</u>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (Seven ed.). Upper Saddle River, NJ Prentice Hall: Pearson.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). Multivariate Data Analysis (8th ed.). United Kingdom: Cengage Learning.
- Heneman, H. G., & Schwab, D. P. (1985, February). Pay Satisfaction: Its Multidimensional Nature And Measurement*. International Journal of Psychology, 20(1), 129–141. <u>https://doi.org/10.1080/00207598508247727</u>
- Hinsch, D. M., Spanier, K., Radoschewski, F. M., & Bethge, M. (2018). Associations between overcommitment, effort–reward imbalance and mental health: findings from a longitudinal study. International Archives of Occupational and Environmental Health, 92(4), 559–567. <u>https://doi.org/10.1007/s00420-018-1391-7</u>
- Jaydarifard, S., Smith, S., Rossa, K., Mann, D., Salehi, E. N., & Soleimanloo, S. S. (2023). The mediating effect of sleep quality and psychological distress on the relationship

between precarious employment and physical health. *Population Medicine*, 5(Supplement). <u>https://doi.org/10.18332/popmed/163873</u>

- Kuroki, M. (2021, December). State minimum wage and mental health in the United States: 2011–2019. SSM - Mental Health, 1, 100040. https://doi.org/10.1016/j.ssmmh.2021.100040
- Li, C., Ning, G., Wang, L., & Chen, F. (2022). More income, less depression? revisiting the nonlinear and heterogeneous relationship between income and mental health. Frontiers in Psychology, 13. <u>https://doi.org/10.3389/fpsyg.2022.1016286</u>
- Liu, X., Xia, X., Hu, F., Hao, Q., Hou, L., Sun, X., Zhang, G., Yue, J., & Dong, B. (2022, March 3). The mediation role of sleep quality in the relationship between cognitive decline and depression. BMC Geriatrics, 22(1). <u>https://doi.org/10.1186/s12877-022-02855-5</u>
- Lund, C., De Silva, M., Plagerson, S., Cooper, S., Chisholm, D., Das, J., et al. (2011). Poverty and mental disorders: breaking the cycle in low-income and middleincome countries. The Lancet, 378(9801), 1502e1514.
- M. Nagasu, I. Yamamoto, Impact of socioeconomic- and lifestyle-related risk factors on poor mental health conditions: a nationwide longitudinal 5-wave panel study in Japan, PLoS One 15 (10) (2020), e0240240, <u>https://doi.org/10.1371/journal.pone.0240240</u>.
- Mackenbach JP. Re-thinking health inequalities. Eur J Public Health 2020; 30: 615.
- McCrae, C. S., & Lichstein, K. L. (2001). Secondary insomnia: diagnostic challenges and intervention opportunities. Sleep Medicine Reviews, 5(1), 47–61. https://doi.org/10.1053/smrv.2000.0146
- Montaño, D., Li, J., & Siegrist, J. (2016). The Measurement of Effort-Reward Imbalance (ERI) at work. In Aligning perspectives on health, safety and well-being (pp. 21–42). https://doi.org/10.1007/978-3-319-32937-6_2
- Ohayon, M. M. (2011). Epidemiological Overview of sleep Disorders in the General Population. Sleep Medicine Research, 2(1), 1–9. https://doi.org/10.17241/smr.2011.2.1.1
- Opare-Asamoah, K., Amuah, J. E., Dongdem, J. T., Majeed, S. F., Mahama, Z. F., & Zakaria, D. N. (2023). The 12-item General Health Questionnaire factorial structure, sociodemographic and work-related factors of Ghanaian nurses and their association with stress: A cross-sectional study. International Journal of Africa Nursing Sciences, 19, 100625. <u>https://doi.org/10.1016/j.ijans.2023.100625</u>
- Park, S., Kook, H., Seok, H., Lee, J. H., Lim, D., Cho, D. H., & Oh, S. K. (2020b). The negative impact of long working hours on mental health in young Korean workers. PLoS ONE, 15(8), e0236931. https://doi.org/10.1371/journal.pone.0236931
- Paul Leigh, J., Leigh, W. A., & Du, J. (2019, January). Minimum wages and public health: A literature review. Preventive Medicine, 118, 122–134. https://doi.org/10.1016/j.ypmed.2018.10.005
- Porru, F., Robroek, S. J. W., Bültmann, U., Portoghese, I., Campagna, M., & Burdorf, A. (2021). Mental health among university students: The associations of effort-reward imbalance and overcommitment with psychological distress. Journal of Affective Disorders, 282, 953–961. <u>https://doi.org/10.1016/j.jad.2020.12.183</u>
- Premji, S. (2017). "It's totally destroyed our life." International Journal of Health Services, 48(1), 106–127. <u>https://doi.org/10.1177/0020731417730011</u>
- Q. Wang, J.A. Tapia Granados, Economic growth and mental health in 21st century China, Soc. Sci. Med. 220 (2019) 387–395, <u>https://doi.org/10.1016/j.</u> <u>socscimed.2018.11.031</u>.
- Ramadhan, K. & Fifi, H. (2020). Si Kerah Biru dalam Pusaran Polemik Penetapan Upah Minimum. Medium. Diakses pada 8 Oktober 2023 dari <u>https://pantau-</u>

ekonomi.medium.com/si-kerah-biru-dalam-pusaran-polemik-penetapan-upahminimum-8c4690f046b

- Reiss F. Socioeconomic inequalities and mental health problems in children and adolescents: a systematic review. Soc Sci Med 2013; 90: 24–31. 12
- Rosfadhila, M. (2019). Developing an Unemployment Insurance Scheme for Indonesia. SMERU Working Paper. The SMERU Research Institute, Jakarta.
- Rugulies, R., Aust, B., & Madsen, I. E. H. (2017). Effort–reward imbalance at work and risk of depressive disorders. A systematic review and meta-analysis of prospective cohort studies. Scandinavian Journal of Work, Environment & Health, 43(4), 294–306. https://doi.org/10.5271/sjweh.3632
- S.G. Anjara, C. Bonetto, T. Van Bortel, C. Brayne, Using the GHQ-12 to screen for mental health problems among primary care patients: psychometrics and practical considerations, Int. J. Ment. Health Syst. 14 (2020) 62, https://doi.org/10.1186/s13033-020-00397-0.
- Sato, K., Kuroda, S., & Owan, H. (2020c). Mental health effects of long work hours, night and weekend work, and short rest periods. Social Science & Medicine, 246, 112774. https://doi.org/10.1016/j.socscimed.2019.112774
- Scott, A., Webb, T. L., James, M. M., Rowse, G., & Weich, S. (2021). Improving sleep quality leads to better mental health: A meta-analysis of randomised controlled trials. Sleep Medicine Reviews, 60, 101556. <u>https://doi.org/10.1016/j.smrv.2021.101556</u>
- Shkembi, A., Levy, D. A., & Neitzel, R. L. (2023). Associations between Poorer Mental Health with Work-Related Effort, Reward, and Overcommitment among a Sample of Formal US Solid Waste Workers during the COVID-19 Pandemic. Safety and Health at Work, 14(1), 93–99. <u>https://doi.org/10.1016/j.shaw.2023.01.004</u>
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. Journal of Occupational Health Psychology, 1(1), 27–41. <u>https://doi.org/10.1037/1076-8998.1.1.27</u>
- Siegrist, J. (2008) Effort-Reward Imbalance and Health in a Globalized Economy. Scandinavian Journal of Work, Environment & Health, 34, 163-168.
- Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I., & Peter, R. (2004, April). The measurement of effort–reward imbalance at work: European comparisons. Social Science & Medicine, 58(8), 1483–1499. <u>https://doi.org/10.1016/s0277-9536(03)00351-4</u>
- Spector, P. E. (1994). Job satisfaction survey.
- Subramanian SV, Kawachi I. Whose health is affected by income inequality? A multilevel interaction analysis of contemporaneous and lagged effects of state income inequality on individual self-rated health in the United States. Health Place. 2006 Jun;12(2):141-56. doi: 10.1016/j.healthplace.2004.11.001. Epub 2005 Jan 18. PMID: 16338630.
- Vieten, L., & Mache, S. (2023). Employees' work breaks and their physical and mental health: Results from a representative German survey. Applied Ergonomics, 110, 103998. <u>https://doi.org/10.1016/j.apergo.2022.103998</u>
- Wang, Q., Zhang, J., Wang, R., Wang, C., Wang, Y., Chen, X., Mi, G., Chen, X., Cheng, X., Wang, L., Zhao, H., Pan, F., & Zhong, X. (2021). Sleep quality as a mediator of the association between coping styles and mental health: a population-based ten-year comparative study in a Chinese population. Journal of Affective Disorders, 283, 147– 155. <u>https://doi.org/10.1016/j.jad.2021.01.045</u>
- Wickham, S., Whitehead, M., Taylor-Robinson, D., & Barr, B. (2017). The effect of a transition into poverty on child and maternal mental health: A longitudinal analysis of the UK millennium cohort study. The Lancet Public Health, 2(3), e141–e148.

- World Health Organization, Mental Health: Strengthening Our Response, 5.15, 2022, https://www.who.int/en/news-room/fact-sheets/detail/mental-health-strengtheningour-response.
- Zhang, J., Wang, R., & Phillips, M. R. (2021). Sleep quality as a mediator of the association between coping styles and mental health: A comparative study in China. Journal if Affective Disorders, 283, 147-155. <u>http://doi.org/10.1016/j.jad.2021.01.045</u>
- Zou, P., Wang, X., Sun, L., Liu, K., Hou, G., Wang, Y., Liu, C., Yang, H., Zhou, N., Zhang, G., Liu, X., Liu, J., Cao, J., Ao, L., & Chen, Q. (2020). Poorer sleep quality correlated with mental health problems in college students: A longitudinal observational study among 686 males. Journal of Psychosomatic Research, 136, 110177. https://doi.org/10.1016/j.jpsychores.2020.110177