

Correlation of Working Style to Stress, Coping Mechanism and Metabolic Syndrome Risk in Sedentary Workers

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ABSTRACT

Introduction: Emotional eating, as a method of stress coping mechanism in workers, makes a person tend to consume more energy daily. Uncontrolled daily intake will lead to a high probability of a person developing metabolic syndrome in the future. The aim of this study is to analyze the relationship between working style to stress, coping mechanisms, and metabolic syndrome risk in sedentary workers. **Method:** This research is a cross-sectional study conducted at Kalla Group. Measurement of blood biochemistry (total cholesterol, blood glucose and uric acid) used FORA 6 Plus, blood pressure was measured using Omron digital sphygmomanometer 7130, waist circumference using Seca 201 measuring tape, and height using GEA microtoise. Measurements of body composition used Omron Karada Scan Hbf 375 Body Fat Composition Monitor Bioimpedance Analyzer. Stress was measured using Kessler Psychological Distress Scale K10 instrument. Coping mechanism was measured using Carver's COPE Inventory. **Result:** Significant correlations were found for cholesterol levels ($p = 0.044$), waist circumference ($p = 0.036$), blood pressure ($p = 0.042$), and muscular percentage ($p = 0.032$). No significant correlations were found between working style for stress level ($p = 0.683$), coping mechanisms ($p = 0.744$), blood glucose ($p = 0.128$), uric acid ($p = 0.380$), visceral fat percentage ($p = 0.128$), and fat mass ($p = 0.547$). **Conclusion:** Significant correlations were found between working style for cholesterol levels, waist circumference, blood pressure, and muscular percentage, suggesting that different working styles may influence these health aspects.

Keywords: degenerative disease, metabolic syndrome, sedentary workers, stress coping mechanism, working style

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INTRODUCTION

Work style is how an employee combines and expresses the professional, organizational, political, and moral value during daily activities in the workplace (Moslehpour *et al*, 2019). Every person has their own work style and each work style determined job satisfaction and personal stress. For example, a study in Romania showed work style has impact on positive interpersonal relationship, motivation, social support, and more effective and efficient management (Niculiță, 2015). For this reason, it is important to know how work style may

impact further life, stress level, and potential health issues in the future.

The adult age group is an age group that is vulnerable to degenerative diseases due to nutritional problems (Gennuso *et al*, 2013; Shuremu, Belachew and Hassen, 2023). This is shown by the increasingly high incidence of obesity which continues to increase every year, as can be seen in the Indonesian Basic Health Research data where, in 2013, the obesity rate was only 14.8%, but increased rapidly in 2018 to reach 21.8% (Ministry of Health Republik Indonesia, 2018). The high potential for overnutrition in adults can trigger various other health problems related to metabolism (Ryan and Heaner, 2014; Christoffersen *et al*, 2023).

Metabolic syndrome is a collection of symptoms that indicate a decrease in the body's ability to carry

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out metabolic functions such as cholesterolemia, hypertension, central obesity, and insulin resistance (Grundy, 2016; Hoyas and Leon-Sanz, 2019). Based on data from the Indonesia Family Life Survey (IFLS), the prevalence of metabolic syndrome in Indonesia is 21.6%, which is dominated by low levels of HDL cholesterol (66.41%), hypertension (64.45%), and central obesity (43.21%) (Zahtamal, Prabandari and Setyawati, 2014; Sigit *et al*, 2020). Metabolic syndrome leads to various degenerative diseases in the future such as stroke, diabetes mellitus, coronary heart disease, and others. The incidence of metabolic syndrome in adults is often caused by wrong food consumption patterns, low physical activity, and stress that is not managed properly (Listyandini *et al*, 2021; Christoffersen *et al*, 2023).

Mental emotional disorder is a health problem that often occurs in the adult age group and its prevalence continues to increase due to stress that is not managed properly (Pertiwi, Denny and Widjasena, 2017; Rose *et al*, 2017). Based on Indonesian Basic Health Research data, it is known that there has been an increase in the number of people with mental emotional disorders from 6% in 2013 to 9.8% in 2018 (Health, 2015; Ministry of Health Republik Indonesia, 2018). Uncontrolled stress is usually caused by personal inability to find appropriate stress coping mechanisms as an effort to regulate stress that occurs within themselves (Graves *et al*, 2021). High stress levels in a person will produce more of the hormone cortisol which creates hunger and satiety signals (van der Meij *et al*, 2018; Stammers *et al*, 2020). This will cause a person to have the desire to eat as an effort to relieve stress from within. This is called the emotional eating phenomenon. The high incidence of emotional eating in adults makes a person tend to consume more energy daily (Tan and Chow, 2014; Serin and Şanlıer, 2018; Rachmawati, Anantanyu and Kusnandar, 2019). Uncontrolled daily intake will lead to a high probability of a person developing metabolic syndrome in the future (Samuel and Cohen, 2018).

Work that does not involve a lot of physical activity, or called sedentary work, is a type of work that involves minimal movement for long periods of time (Park *et al*, 2018). Sedentary workers sit more at work and do a lot of activities in front of the screen. Monotonous work conditions and minimal movement cause workers to experience higher levels of work stress and the potential for

emotional eating (Tan and Chow, 2014; Samuel and Cohen, 2018; Serin and Şanlıer, 2018). The high level of emotional eating in the workplace makes workers snack more often and have a poor diet (high in sugar, salt and fat). This makes the incidence of metabolic syndrome and degenerative diseases more common in sedentary workers (Upadhyay *et al*, 2018). Until now there has been no research related to stress coping mechanisms for dealing with stress in sedentary workers in Eastern Indonesia. Compared to conditions in the western part of Indonesia, the eating habits of people in the eastern part of Indonesia are very different, for example, by the high consumption of high fat food like organs, high fish consumption, and high coconut milk. For this reason, this research was conducted with the aim of looking at the relationship between working style, stress, and coping mechanisms to the metabolic syndrome risk in sedentary workers.

METHOD

This research is an observational study with the research design used is cross-sectional. The research was conducted at the Kalla Group in Makassar, South Sulawesi, Indonesia. Kalla Group was chosen because it is one of the largest companies in Eastern Indonesia which controls various sectors ranging from infrastructure, transportation, to expeditions. The research was conducted between June and August 2023. The population selected was Kalla Group workers in the headquarters and branch offices in South Sulawesi Province. The subjects selected were permanent employees of the Kalla Group who had worked for at least six months, were workers with a sedentary activity level, and were willing to take part in a series of research as evidenced by signing an informed consent. A total of 133 workers from total of 1600 workers as population were selected using a purposive sampling technique according to the proportion of workers based on work subsector.

The independent variable measured in this study is working style. Meanwhile the dependent variables measured include stress level, coping mechanism, metabolic syndrome (cholesterol, blood glucose, uric acid, waist circumference, and blood pressure), and body composition (muscular percentage, visceral fat percentage, and fat mass percentage). Working style is measured using Working Style Assessment Questionnaire made by East London NHS Foundation Trust. The questionnaire consisted

of five multiple choice questions, with which each option of choices having a different referral to a specific working style. The highest ranks for all five questions are then concluded to identify the working style of each worker. The results are then divided each respondent into four types of working style namely analytical, driver, amiable, and expressive.

Metabolic syndrome measurements are carried out using several parameters, namely total cholesterol levels, blood glucose levels, uric acid levels, waist circumference, and blood pressure. Measurement of blood biochemistry (total cholesterol, blood glucose and uric acid) using the FORA 6 Plus blood multifunctional monitoring system. Blood pressure was measured using an Omron digital sphygmomanometer 7130. Blood pressure measurements were carried out when the subject was at rest, had not been doing work in the last one hour, and had not been doing physical activity in the last one hour.

Waist circumference was measured using a Seca 201 measuring tape. Height was measured using the GEA microtoise. Measurements of body weight, muscular percentage, visceral fat and fat mass were carried out using the Omron Karada Scan Hbf 375 Body Fat Composition Monitor series Bioimpedance Analyzer. Body composition measurements were taken by wearing the lightest clothing possible, not wearing metal jewelry that is conductive, not carrying any items, and not wearing footwear. Subjects were asked to stand on the tool and hold the tool for approximately three seconds.

Stress measurement was carried out using the Kessler Psychological Distress Scale K10 instrument. Coping mechanism measurements were carried out using the COPE Inventory instrument. The K10 questionnaire used consists of 10 questions and the coping mechanism questionnaire consists of 24 questions. The questionnaire is given online using Google Form and is a self-assessment based on the results of performance assessments over the last three months.

Data processing was carried out using STATA 12 software. Normality testing was carried out using the Kolmogorov Smirnov test, followed by hypothesis relationship testing carried out using the Chi Square test for categorical data (nominal and ordinal) with the Pearson method for normally distributed data, and with the Fisher's exact method for data that are not normally distributed. Linear regression for ratio data was carried out using the One Way ANOVA test. The research was approved

by the Health Research Ethics Committee, Faculty of Public Health, Universitas Airlangga with number 96/EA/KEPK/2023.

RESULTS

Table 1. presents a comprehensive overview of the respondents' characteristics, revealing out of the total respondents, 74 were male, accounting for 55.64% of the sample, and slightly older demographic with 69 respondents were older than 30 years, representing 51.88% of the sample. Stress levels are predominantly severe with 39 respondents (29.32%) falling into the moderate stress category and 70 respondents (52.63%) were classified as having severe stress. A significant portion utilizing problem-focused coping mechanisms were found with 74 respondents (55.64%) who employed problem-focused coping strategies. Analytical working styles are prevalent with 62 respondents (46.62%) were analytical. Metabolic health indicators such as cholesterol, blood glucose, and uric acid levels show a varied distribution, with a notable portion of the population having high measurements namely 64 respondents (48.12%) had high cholesterol levels, 26 respondents (19.55%) had high blood glucose levels, and 39 respondents (29.32%) had high uric acid levels.

Waist circumference and blood pressure data indicate a substantial proportion of respondents at risk where 68 respondents (51.13%) were classified as high risk based on their waist circumference, 57 respondents (42.86%) were in the prehypertension category, 10 respondents (7.52%) had Stage 1 hypertension, and 2 respondents (1.50%) had Stage 2 hypertension. Muscle mass (84 respondents (63.16%) had a low muscular percentage), visceral fat (29 respondents (21.80%) had high visceral fat and 17 respondents (12.78%) had very high visceral fat), and overall fat mass percentages (43 respondents (32.33%) had a high fat mass percentage and 72 respondents (54.14%) had a very high fat mass percentage) highlight areas of concern regarding body composition and potential health risks.

Table 2 illustrates various correlations between working style and health indicators. Significant correlations were found for cholesterol levels ($p = 0.044$), waist circumference ($p = 0.036$), blood pressure ($p = 0.042$), and muscular percentage ($p = 0.032$), suggesting that different working styles may influence these health aspects. No significant correlations were found between working style for

Table 1. Respondent Characteristics

Characteristics	Frequency (n)	Percentage (%)
Sex		
Male	74	55.64
Female	59	44.36
Age		
≤30 years old	64	48.12
> 30 years old	69	51.88
Stress Category		
Well	16	12.03
Mild disorder	8	6.02
Moderate disorder	39	29.32
Severe disorder	70	52.63
Coping Mechanism		
Emotional focused coping	59	44.36
Problem focused coping	74	55.64
Working Style		
Amiable	15	11.28
Analytical	62	46.62
Driver	35	26.31
Expressive	21	15.79
Cholesterol		
Normal	69	51.88
High	64	48.12
Blood Glucose		
Normal	107	80.45
High	26	19.55
Uric Acid		
Normal	94	70.68
High	39	29.32
Waist Circumference		
Normal	65	48.87
High Risk	68	51.13
Blood Pressure		
Normal	64	48.12
Pre Hypertension	57	42.86
Stage 1 Hypertension	10	7.52
Stage 2 Hypertension	2	1.50
Metabolic Syndrome Status		
Normal	96	72.18
Metabolic Syndrome	37	28.82
Muscular Percentage		
Low	84	63.16
Normal	34	25.56
High	10	7.52
Very High	5	3.76

Advanced Table 1. Respondent Characteristics

Characteristics	Frequency (n)	Percentage (%)
Visceral Fat Percentage		
Normal	87	65.42
High	29	21.80
Very High	17	12.78
Fat Mass Percentage		
Normal	18	13.53
High	43	32.33
Very High	72	54.14

stress level ($p = 0.683$), coping mechanisms ($p = 0.744$), blood glucose ($p = 0.128$), uric acid ($p = 0.380$), visceral fat percentage ($p = 0.128$), and fat mass ($p = 0.547$), indicating that working style might not have a strong impact on these factors.

DISCUSSION

Respondent Characteristics

The data provided in Table 1 highlight key aspects of respondents' health, including stress levels, coping mechanisms, and metabolic health indicators, all of which are relevant for understanding health risks in sedentary workers. Research suggests that chronic stress, especially when it reaches severe levels as shown by 52.63% of respondents in data, significantly increases the risk of cardiovascular diseases and other stress-related conditions (Proia *et al*, 2016; Anestal, 2022; Hoveling *et al*, 2022; Shchaslyvyi, Antonenko and Telegeev, 2024).

Problem-focused coping mechanisms, which were predominant in 55.64% of respondents, are known to be effective in mitigating stress's negative health impacts, as they focus on addressing the cause of stress directly (Anestal, 2022; Theodoratou and Argyrides, 2024). Moreover, the high percentage of respondents with metabolic health issues, including elevated cholesterol (48.12%), blood glucose (19.55%), and uric acid (29.32%), signals a significant risk for cardiovascular diseases, diabetes, and other metabolic conditions. Elevated waist circumference and high blood pressure among respondents further support these health risks, indicating potential for increased cardiovascular disease prevalence (Salk, Hyde and Abramson, 2017; Bonnet *et al*, 2020; Aly *et al*, 2022).

The implications of these findings emphasize the need for targeted health interventions, particularly

Table 2. Correlation of Working Style to Stress Level, Coping Mechanism, Metabolic Syndrome Indicator, and Body Composition

	Working Style								X ²	p*
	Amiable		Analytical		Driver		Expressive			
	n	%	n	%	n	%	n	%		
Stress Level										
Mild Disorder	1	0.75	7	5.26	5	3.75	3	2.65	6.558	0.683
Moderate Disorder	1	0.75	6	4.50	1	0.75	0	0.00		
Severe Disorder	3	2.65	18	13.53	13	9.77	5	3.75		
Well	10	7.50	21	15.79	16	12.03	13	9.77		
Coping Mechanism										
Emotional Focused	7	5.26	29	21.80	16	12.03	7	5.26	8.084	0.044
Problem Focused	8	6.00	33	24.81	19	14.29	14	10.52		
Cholesterol										
High	7	5.26	27	20.30	14	10.52	16	12.03	9.917	0.128
Normal	8	6.00	35	26.32	21	15.79	5	3.75		
Blood Glucose										
High	6	4.50	18	13.53	7	5.26	8	6.00	3.075	0.380
Normal	9	6.77	44	33.08	28	21.05	13	9.77		
Waist Circumference										
High Risk	13	9.77	29	21.80	16	12.03	10	7.50	8.566	0.036
Normal	2	1.50	33	39.85	19	14.29	11	8.27		
Blood Pressure										
Prehypertension	4	3.00	24	18.00	17	12.78	12	9.00	13.441	0.042
Stage 2 Hypertension	0	0.00	3	2.65	6	4.50	4	3.00		
Stage 1 Hypertension	1	0.75	0	0.00	1	0.75	24	18.00		
Normal	10	7.50	35	26.32	11	8.27	17	12.78		
Muscular Percentage										
Low	11	8.27	30	26.50	28	21.05	15	13.25	18.288	0.032
High	3	2.65	6	4.50	1	0.75	0	0.00		
Very High	0	0.00	3	2.65	2	1.50	0	0.00		
Normal	1	0.75	22	16.54	5	3.75	6	0.75		
Visceral Fat Percentage										
High	3	2.65	13	9.77	10	7.50	3	2.65	9.911	0.128
Very High	5	3.75	3	2.65	5	3.75	5	3.75		
Normal	8	6.00	45	33.83	20	15.00	13	9.77		
Fat Mass										
High	3	2.65	21	15.79	11	8.27	8	6.00	4.974	0.547
Very High	11	8.27	29	21.80	21	15.79	10	7.50		
Normal	1	0.75	11	8.27	4	3.00	3	2.65		

those addressing stress management, metabolic health monitoring, and lifestyle changes. Behavioral stress reduction programs (BSRPs), which have shown promise in reducing stress and improving health outcomes, could be particularly useful for populations experiencing both psychological and metabolic stress (Kivimäki, Bartolomucci and

Kawachi, 2023; Hill, Mostafa and Obeng-Gyasi, 2024). By integrating stress management with health monitoring, interventions could mitigate the elevated risk factors seen in this population. Future health policies and programs may benefit from incorporating problem-focused coping strategies and stress-reduction techniques as part of

a comprehensive approach to managing stress and metabolic health (James *et al*, 2023; Ebrahim *et al*, 2024).

Correlation Test

The relationship between working style and various health indicators, such as stress level, coping mechanisms, metabolic syndrome indicators, and body composition, is complex and multifaceted. As stated by Moslehpour (2019), working style is how an employee combines and expressed the professional, organizational, political, and moral value during daily activities in workplace. Every person has their own work style and each work style determines job satisfaction and personal stress. Working style significantly impacts an individual's stress level. High job demands, low control, and imbalance between effort and reward are well-established predictors of work-related stress. The job demand-control (JDC) model posits that high job demands and low job control lead to increased stress levels (International Labour Organization, 2016). Similarly, the effort-reward imbalance (ERI) model suggests that a disproportionate balance between the efforts put into work and the rewards received exacerbates stress (Goetzel *et al*, 2014; Balogh *et al*, 2019; Kinman, 2019).

Stress Level

There was no significant correlation found between working style and stress level ($p = 0.683$). However, the data suggest that individuals with an analytical working style experienced higher levels of severe stress (13.53%) compared to other working styles. In contrast, amiable individuals showed the highest percentage of being well (7.50%). The lack of significant correlation suggests that while certain working styles might exhibit higher stress levels, other factors likely contribute to stress management and perception. This aligns with existing literature indicating that individual stress responses are multifactorial, influenced by personality, work environment, and coping mechanisms (Arnett, Žukauskiene and Sugimura, 2014; Nordander *et al*, 2016; Anestal, 2022; Khairy, 2022).

Coping Mechanism

Coping mechanisms are strategies employed by individuals to manage stress. Working style influences the adoption of specific coping mechanisms. For example, individuals in high-stress

jobs may rely more on problem-focused coping, such as time management and seeking support, while those in lower-stress environments might engage in emotion-focused coping, such as relaxation and avoidance (Anestal, 2022; Khairy, 2022; Aras, Tandiyuk and Fatihah, 2023).

The study found no significant correlation between working style and coping mechanisms ($p = 0.744$). Problem-focused coping was more prevalent across all working styles, with analytical individuals showing the highest percentage (24.81%). This suggests that regardless of working style, individuals may prefer problem-focused coping strategies, which involve tackling the problem directly to alleviate stress. This finding is consistent with the coping theory which posits that problem-focused coping is often more effective in controllable stress situations (Graves *et al*, 2021; Lestari, 2021; Khairy, 2022).

Metabolic Syndrome

Metabolic syndrome is a cluster of conditions that increase the risk of heart disease, stroke, and diabetes. Indicators include abdominal obesity, high blood pressure, elevated fasting glucose, high triglycerides, and low HDL cholesterol levels. Sedentary working styles, characterized by prolonged sitting and lack of physical activity, are strongly associated with metabolic syndrome. Studies have shown that sedentary behavior increases the risk of developing metabolic syndrome by up to 50% (Grundy, 2016; Hoyas and Leon-Sanz, 2019; Listyandini *et al*, 2021).

There was a significant correlation between working style and cholesterol levels ($p = 0.044$). Analytical individuals had the highest percentage of high cholesterol (20.30%). A significant correlation was found at waist circumference ($p = 0.036$), with analytical individuals again showing the highest risk (21.80%). Significant correlation was observed at blood pressure ($p = 0.042$). Analytical individuals had a higher incidence of prehypertension (18.00%). The significant correlation between working style and certain metabolic syndrome indicators suggests that individuals with an analytical working style may be at higher risk for cardiovascular and metabolic diseases. This could be due to the nature of analytical work, which may involve prolonged periods of sedentary behavior and higher stress levels, known risk factors for these conditions (Rahma Listyandini *et al*, 2021; Khairy, 2022; Aras, Tandiyuk and Fatihah, 2023).

Body Composition

Body composition, which includes the proportion of fat and non-fat mass in the body, is influenced by working style. Physically demanding jobs often result in lower body fat percentages and higher muscle mass, whereas sedentary jobs can lead to increased body fat and decreased muscle mass. Research indicates a significant correlation between sedentary working styles and higher body mass index (BMI) (Barnes *et al*, 2015; Park, 2017; Srikanthan *et al*, 2021).

Significant correlation on muscular percentage was found ($p = 0.032$), with analytical individuals showing higher percentages of low muscular percentage (26.50%). Meanwhile no significant correlation was found for these metrics for other metrics (visceral fat, fat mass). The significant correlation between working style and muscular percentage highlights the potential impact of work environment and style on physical health. Analytical work, often associated with sedentary behavior, may lead to lower muscle mass, increasing the risk for various health issues (Santos *et al*, 2014; Tseng *et al*, 2014; Park, 2017; Wang and Torriani, 2020).

Recommendation

Integrating these findings, it is clear that working style is a crucial determinant of overall health. High-stress working styles exacerbate stress levels and may lead to maladaptive coping mechanisms, while sedentary working styles contribute to adverse metabolic outcomes and poor body composition. Consequently, interventions aimed at modifying working styles, such as increasing job control, ensuring adequate rewards, promoting physical activity, and implementing stress management programs, can mitigate these negative health effects. It is important to assess each workers early to their working style from their recruitment process in order to place workers in the right position to prevent them from unsuitable job desk and interest and may decrease the work stress and increase the job satisfaction, for example, by using several assessment tools like Myers-Briggs Type Indicator (MBTI), DISC assessment, or the Big Five Personality Traits. Each assessment can identify personal preferences in working style like introversion or extraversion which then significantly affects their cooperation in work. This reason may enhance self-awareness among employees and improve team collaboration by highlighting diverse

strength and work preferences. This may allow the head of work team to tailor the leadership style and communication strategies to personalize among different working styles.

Several technical recommendations act as efforts which need to be done as well to prevent workers from future metabolic syndrome development by reduction of stress possibilities happening during work. The leaders need to be able to customize several activities to reduce stress based on diverse working style environment, like conducting team building activities, implementing cross-functional training, creating diversity-inclusive policies, utilizing diverse communication and collaboration working tools, giving one-on-one regular feedback, using open communication channels through different communication styles, and aligning team goals based on individual strengths. A supportive and collaborative work environment enhances social support, which is critical for stress reduction and improved mental health. Research shows that workers with strong social support tend to have lower stress levels and better coping mechanisms. Encouraging teamwork and open communication enables workers to problem-solve together, fostering an analytical working style that can alleviate stress. In hope these effort can accommodate the needs of the team to work in better environment following the diverse working styles (Bush *et al*, 2014; Goetzel *et al*, 2014; Samudera, Efendi and Indarwati, 2021).

Regular movement breaks, such as 5-minute standing or stretching breaks every hour, reduce physical strain and prevent mental fatigue. Frequent breaks to walk or stretch have been linked to improvements in cholesterol, blood sugar, and waist circumference. Consider using standing desks or walking meetings to integrate more movement into the workday, as this can reduce the harmful effects of prolonged sitting. Offering employees access to mindfulness training, yoga, and cognitive-behavioral therapy workshops can help improve emotional regulation and promote adaptive coping strategies, reducing reliance on maladaptive mechanisms like avoidance. Such programs help individuals manage stress by reframing negative thoughts and promoting relaxation techniques that can reduce mental and physical stress indicators (Goetzel *et al*, 2014; Hosker, Elkins and Potter, 2019; Shchaslyvyi, Antonenko and Telegeev, 2024; Theodoratou and Argyrides, 2024).

Periodic health assessments that monitor cholesterol, blood glucose, and body composition

can help workers stay aware of their health risks. Providing incentives like gym memberships or health bonuses for maintaining good metabolic health can motivate workers to engage in healthier lifestyles. Providing access to healthy meals in the workplace or encouraging participation in group fitness activities can reduce the risks associated with metabolic syndrome, including high cholesterol and blood glucose levels. These measures also have positive effects on mental well-being, creating a more productive work environment (Zahtamal, Prabandari and Setyawati, 2014; Hoyas and Leon-Sanz, 2019; Rahma Listyandini *et al*, 2021; Anestal, 2022; Kivimäki, Bartolomucci and Kawachi, 2023)

CONCLUSION

Significant correlations were found between working style for cholesterol levels, waist circumference, blood pressure, and muscular percentage, suggesting that different working styles may influence these health aspects. No significant correlations were found between working style for stress level, coping mechanisms, blood glucose, uric acid, visceral fat percentage, and fat mass, indicating that working style might not have a strong impact on these factors. This discussion highlights the interconnectedness of working style with stress levels, coping mechanisms, metabolic syndrome indicators, and body composition. Understanding these relationships is essential for developing effective workplace interventions to promote employee health and well-being.

CONFLICT OF INTEREST

The author declare there is no conflict of interest during the process of the research.

AUTHOR CONTRIBUTION

DRA and SYA: designing the study method, funding acquisition, analyzing the data, writing the manuscript. BSPI: managing resources, data collection, data curation, editing manuscript. AMA and ANN: managing resources, data collection, and data management. MAP and ASR: managing the research process, managing the respondents, managing the resources, communicating with stakeholders.

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