

Health and Safety Executive Work Related Stress Scale - Indonesian Version: Reliability and Convergent Validity

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ABSTRACT

Introduction: Existing measures of occupational stress often do not count an essential factor that determines the level of worker stress, which is psychosocial factors. The purpose of this study was to examine the psychometric features of an adaptation of the Health and Safety Executive-Work Related Stress Scale (HSE-WRSS), a measure that includes psychosocial factors to measure work stress. **Methods:** Cronbach alpha was used to determine reliability and convergent validity, by correlating it with other instruments, namely the Employee Well Being (EWB) scale and the neuroticism scale as part of the Big Five Inventory (BFI). Questionnaires were distributed online via Google Forms, and data processing was performed using JASP 12. **Results:** Data on a total of 210 out of 239 employees were processed for reliability testing and item analysis. Meanwhile, data for 37 employees were processed to be tested for a convergent validity test. The dependability of each dimension was between 0.67-0.82. Meanwhile, item analysis revealed that 33 items had a good Crit value with a correlation between item-total >0.30 , whereas 2 items had a bad Crit value with a correlation between item-total 0.30 . Correlation analysis revealed a positive and substantial relationship between the HSE-WRSS and the EWB scale, and a negative and significant relationship between the HSE-WRSS and neuroticism. **Conclusion:** In general, the results of this investigation demonstrate that the HSE-WRSS measurement is trustworthy and valid in the Indonesian version.

Keywords: neuroticism, reliability, validity, work-related stress scale, work well-being

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INTRODUCTION

Work stress is an example of an individual construct that has detrimental effects on companies and personal lives. Previous research has shown that work stress influences employee performance (Gilboa *et al.*, 2013; Yani and Dwiyantri, 2017; Grasiawaty and Handayani, 2020), job satisfaction (Runtulalo, Areros and Sambul, 2020), health (Schreurs *et al.*, 2010; Herr *et al.*, 2015; Killinger *et al.*, 2017) and their family (Lambert, Hogan and Barton, 2004; Mansour and Tremblay, 2016; Hertz, Mattes and Shook, 2020). Given the plethora of negative effects of work stress on individuals and the businesses for which they work, past research has attempted to detect work stress in employees by developing measures for evaluating workplace stress.

Numerous researchers began developing various instruments for assessing occupational stress following the inaugural study conducted by Sims, Szilagyi and Keller (1976). Sims *et al.* (1976) used the job characteristic inventory scale to conduct research (regarding the measurement of work-related characteristics). This study examined six categories to measure job-related factors, namely variety, autonomy, feedback, working with others, task identity, and friendship. This scale had alpha Cronbach from 0.74 up to 0.80, indicating quite good reliability. This technique has dominated the measurement of work stress to evaluate employment characteristics for almost a decade.

Along with the evolution of work that is increasingly driven by technological advancements and the influence of technology on how humans operate, it is regarded vital to quantify work stress in relation to the influence of this technology. Jackson, Wall, Martin, and Davids then developed a subsequent measuring device that incorporated some technological features (Jackson *et al.*, 1993).

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This tool represents a novel technique for evaluating stress in employees working in the advanced manufacturing technology (AMT) industry. This study found unique predictors of employee performance in the AMT sector compared to other sectors. Alpha Cronbach attained in this research was 0.5 up to 0.90, indicating good reliability.

Additionally, a team of researchers from the United Kingdom conducted a meta-analysis to determine factors that influenced job features and affected mental health and job satisfaction among health care employees. They conducted a meta-analysis in the health sector since there were limited techniques for measuring worker well-being. Factors affecting worker well-being may also differ across industries. According to the meta-analysis findings, factors affecting the performance and well-being of health sector workers were autonomy and control, feedback, influence over decision-making, leader support, professional compromise, role clarity, role conflict, peer support, and job expectations. Furthermore, Haynes, Wall, Bolden, Stride, and Rick devised a measuring instrument based on the criteria identified in the meta-analysis (Haynes *et al.*, 1999). The findings of the quality test of this measuring instrument indicated that it fit the measurement model well, had a high degree of internal reliability, and had good construct validity. A further study conducted by Haynes *et al.*, (1999) examined nine variables of perceived job characteristics, including autonomy and control, feedback, influence over decisions, leader support, professional compromise, role clarity, role conflict, peer support, and work expectations. It revealed values ranging from 0.70 to 0.92 using Cronbach's alpha. However, previous approaches for measuring work-related stress have not accounted for psychosocial factors, which are a significant driver of pressure in workers. Existing research focuses more on occupational stress than on psychological response elements.

Psychosocial risk variables in the workplace are defined as all features of task designs, including social, organizational, and job management characteristics, all of which can cause physical and psychological distress to workers. Additionally, this disorder is frequently accompanied by changes in workers' feelings, attitudes, behaviour, and physiological processes.

One work stress detection method that considers psychosocial factors is the Health & Safety Executive (HSE). In the United Kingdom, the Health and Safety Executive (HSE) is responsible

for occupational health and safety (Cousins *et al.*, 2004; Mackay *et al.*, 2004). The Health & Safety Executive (HSE) is committed to eliminating workplace stress that can harm workers' health. This scale was developed to assist organizations in identifying primary hazards that contribute to work stress, preventing the hazards, and establishing benchmarks for their success in detecting the causes of work stress early enough to intervene. The Health and Safety Executive (HSE) identified 6 (six) management standards that are related to decreased productivity, poor health, increased disease, and more severe workplace accidents (Cousins *et al.*, 2004). According to Cousins *et al.*, the six standards are as follows: (1) Demands addressing individual difficulties such as workload, work patterns, and work environment; and (2) Controls on how much individuals express the way they conduct their work. (3) Managerial support related to the extent to which superiors provide support to individuals related to their work; (4) Colleague support related to the extent to which colleagues provide support to individuals related to their work; (5) Relationships related to the relationships that exist within the organization, both between colleagues and with superiors; and (6) Role related to how individuals understand their job responsibilities. The HSE-WRSS indicator has been validated through several studies as a multidimensional instrument for quantifying work stress. In the original development research of the HSE-WRSS, Cousins *et al.* used a sample of 15,000 participants to assess stress on UK employees in their original research. Their findings indicated that the reliability of employing Cronbach's alpha in each category ranged from 0.78 to 0.89. The results of another research conducted by Edwards *et al.* (2008) are not similar to those of the original HSE-WRSS development conducted by Cousins *et al.* with Cronbach alpha ranging from 0.78 to 0.88.

This scale has been used throughout its development in several countries (e.g. Italy) for research purposes. The first study conducted by Magnavita utilized the management standards for revised indicator tool (MS-RIT), which had high-reliability test scores of 0.75 to 0.86. Magnavita (2012) downgraded the "managerial support" and "change" parameters to 'flexibility'. According to Magnavita, these traits can represent employees' adaptability in Italy to overcome hurdles and change jobs according to the time and method with the employer's consent. Then, in the another study

conducted by Guidi, Bagnara and Fichera (2012), it was determined that each dimension's dependability was between 0.79 and 0.81. Guidi *et al.* discovered a negative correlation between the HSE-WRSS subscale and psychological distress. As demonstrated by this research, stress may be detrimental to both persons and organizations.

Additionally, adaptation was undertaken in another European country (Boyd, Kerr and Murray, 2016). This study used the Republic of Ireland Management Standard Indicator Tool (ROI-MSIT), which had a reliability score of 0.75-0.91. They integrated the dimensions of managerial support and transformation into a single dimension.

Furthermore, the HSE-WRSS has been utilized in several types of research examining work-related stress. The Cronbach alpha reliability of the HSE indicator was employed in the research of Marcatto *et al.* (2014) showing alpha-Cronbach reliability ranging from 0.66 - 0.89. Another study used this HSE-WRSS to conduct work stress research among health centre staff in Iran. Additionally, the HSE-WRSS describes specific job stress variables, making it easier to recognize worker stress. In Europe, this HSE-WRSS rating serves as a benchmark for national programs promoting positive work (Boyd, Kerr and Murray, 2016). Given the development of the HSE-WRSS and the need for a good work stress measuring instrument in Indonesia, the researchers believe it is vital to conduct a psychometric property analysis of the Indonesian version of the HSE-WRSS measuring instrument. Previous studies have also revealed inconsistencies in the construct of conclusions for the adaptation (Magnavita, 2012; Boyd, Kerr and Murray, 2016). The objective of this research is to adapt the HSE-WRSS measuring instrument to the Indonesian version so that it can be utilized by Indonesian researchers in future research to measure work-related stress accurately and to examine relevant items to be applied to samples in Indonesia. Previously, several research on work stress conducted in Indonesia primarily focused on employee satisfaction and motivation (Issom and Makbulah, 2017; Yani and Dwiyantri, 2017; Nabawi, 2019).

METHODS

The population studied in this study consisted of Indonesian workers. The inclusion criteria in this study were all blue-collar and white-collar workers in Indonesia, as well as workers who accidentally

met the researchers or knew about this study, agreed with the informed consent and were willing to be research participants until it was completed. Workers who did not participate in the study until it was completed were excluded from this study. The researchers used an accidental sampling technique, selecting a sample based on chance, i.e., anyone who met the researchers and possessed the necessary characteristics as a data source. The Indonesian version of the HSE Scale Work-Related Stress Measuring Tool has passed the research ethical eligibility No. 241/KEP-UY/BIA/XII/2020.

The measuring instrument was the HSE-WRSS tool that Grasiawaty and Handayani (2020) previously adapted. This tool was originally designed by the UK's body responsible for occupational health and safety, the Health & Safety Executive (Cousins *et al.*, 2004). In this study, the adaptation process was guided by guidelines (Beaton *et al.*, 2000). The HSE-WRSS measured work stress on five dimensions, including demands (regarding workload, work patterns, and work environment), control (regarding how workers do their work), managerial support (regarding how superiors support their work), support colleague support (regarding how coworkers support their work), and relationship (about how the organization manages the changes that occur in the organization). This scale contained five Likert-like response options: 1: Never, 2: Rarely, 3: Occasionally, 4: Frequently, and 5: Always. Each component of work stress (HSE) has distinct features, including role, managerial-support, colleague-support, and change. The higher the score, the more positive the work stress. Meanwhile, the greater the score on the aspects of demands and control, the more detrimental the work stress. The researchers assessed convergent validity using the EWB scale developed by Zheng *et al.* (2015) and the Neuroticism scale component of the BFI Indonesian version validated by Ramdhani (2012) and Wibowo *et al.* (2017). To assess the HSE-convergent WRSS's validity, 37 workers were recruited.

Adaptation Procedure

The adaptation of this cross-cultural measurement tool followed instructions and recommendations by Beaton *et al.* (2000). Stage 1: Instrument translation. At this point, two translators completed the original translation. These two translators must have backgrounds that are dissimilar. Each item was translated by

two interpreters. The initial translator must be familiar with the concepts underlying each item on the HSE-WRSS measurement instrument. In contrast to the first translator, the second translator must be a sworn translator from the language of origin of the measuring instrument or a licensed speaker of that language who does not understand the items contained in the HSE-WRSS measuring instrument.

Stage 2: Synthesis. At this stage, selection was conducted through debate to ensure that the appropriate words were used and that the original meaning was conveyed before the text was translated into Indonesian.

Stage 3: Backtranslate, during which the results of the synthesis were provided to native language speakers, also known as native speakers. Stage 4: Expert committee review. It is critical for cross-cultural adaptation since it requires the expert judgment committee to examine all translations for equivalence between sources and research aims. Stage 5: Pre-final version test, which was used to determine the readability of each test item. At this point, the scale in its Indonesian form was

distributed to research participants to determine whether the translated scale was comprehended by them.

Stage 6: Evaluation of the adaption process. The researchers sent documents to the coordinating committee for evaluation of the adaptation process at this level. Stage 7: Instrument administration. At this point, the researchers organized the objects on a scale and distributed them to eligible individuals. Stage 8: Result analysis. At this point, the researchers analyzed the data that had been gathered. Alpha conbrach reliability analysis and convergent validity analysis were employed in this stage.

RESULTS

The descriptive analysis containing demographic information about the respondents is presented in Table 1. There were 210 respondents participating in this study, with a majority of blue-collar employees participating (62.9%). Most of the participants' latest educational degree was high school (62.8%). The total of men participating was higher than women (50.9%). The range of age was between 18 and 61 years old (Mean = 25.98, SD = 7.694).

Reliability Analysis

Based on the findings of the reliability test in Table 2, the overall dimensions' reliability was 0.864, with the reliability values of these following dimensions: demands (0.819), control (0.759), managerial support (0.637), colleague support



Figure 1. Adaptation Procedure Flowchart

Table 1. Demographic Distribution in Indonesia, 2020

Variables	Participants Frequencies	Percentage (%)
Gender		
Men	107	50.9
Women	103	49.1
Last Education		
High School/Equal Education	132	62.8
Diploma	17	8.0
Bachelor	47	22.6
Master	13	6.2
Doctorate	1	0.4
Work Characteristic		
Blue Collar	132	62.9
White Collar	78	37.1

Table 2. Item Analysis and Reliability Results

Items / Dimension	(N=210)				Cronbach Alpha
	Mean	Sd	Crit	If item drops	
Demands					0.819
I feel pressured by work hours that do not match the workload (Saya merasa ditekan oleh waktu kerja tidak sesuai dengan beban kerja)	2.512	1.281	0.576	0.793	
I feel pressured to work long hours (Saya merasa tertekan dengan waktu kerja yang terlalu lama)	2.578	1.264	0.598	0.790	
I got unattainable work deadlines (Saya mendapat tenggat waktu kerja yang tidak mungkin dicapai)	2.389	1.126	0.510	0.803	
I have to work very fast (Pekerjaan menuntut saya bekerja dengan ritme yang cepat)	3.635	1.127	0.521	0.801	
I have to work very intensively (Pekerjaan saya menuntut untuk dapat diselesaikan dengan intensitas yang tinggi)	3.896	1.090	0.275	0.831	
I am unable to take sufficient breaks (Saya merasa tidak dapat beristirahat dengan cukup)	2.536	1.254	0.691	0.776	
I have to neglect some tasks because I have too much to do (Saya harus mengabaikan beberapa tugas karena memiliki terlalu banyak tugas lain yang harus saya lakukan)	2.739	1.255	0.614	0.788	
Employees from various divisions demand that I do many difficult jobs at once (Karyawan dari berbagai divisi menuntut saya melakukan berbagai pekerjaan yang sulit dilakukan dalam satu waktu)	2.493	1.173	0.513	0.802	
Control					0.759
I have the power to decide how I do my work (Saya punya wewenang memutuskan bagaimana melakukan pekerjaan saya)	2.114	1.081	0.396	0.749	
I can decide when to take a break (Saya bisa menentukan kapan untuk istirahat)	2.237	1.219	0.479	0.730	
I have the power to determine my own work speed (Saya mempunyai kuasa untuk menentukan cepat lambatnya pekerjaan saya)	2.360	1.188	0.658	0.679	
I have a choice in deciding what I do at work (Saya punya pilihan dalam memutuskan apa yang saya lakukan di tempat kerja)	2.237	1.096	0.659	0.683	
I have the power to determine how I work (Saya mempunyai kewenangan menentukan bagaimana dengan cara apa saya bekerja)	1.957	1.030	0.559	0.711	
My working time can be flexible (Saya memiliki waktu kerja yang fleksibel)	2.526	1.307	0.307	0.781	
Managerial Support					0.637
My line manager encourages me at work (Atasan saya mendukung pekerjaan saya)	1.559	0.683	0.350	0.611	
I am given supportive feedback on the work I do (Saya diberi umpan balik yang berguna untuk pekerjaan saya)	2.137	1.002	0.407	0.576	
I can rely on my line manager to help me out with a work problem (Saya dapat mempercayai atasan saya untuk membantu saya mengatasi masalah pekerjaan)	2.237	1.117	0.447	0.554	
I can talk to my line manager about something that upsets or annoys me at work (Saya dapat berbicara dengan atasan jika ada yang membuat kesal atau mengganggu dalam pekerjaan)	2.303	1.114	0.422	0.568	
I am supported when I do emotionally demanding work (Saya didukung saat menjalankan pekerjaan yang menuntut emosi)	2.720	1.243	0.364	0.605	

Advanced Table 2. Item Analysis and Reliability Results

Items / Dimension	(N=210)				Cronbach Alpha
	Mean	Sd	Crit	If item drops	
Colleague Support					0.819
If work gets difficult, my colleagues will help me (Jika pekerjaan semakin sulit, rekan-rekan kerja akan membantu saya)	2.123	1.080	0.612	0.797	
I get the help and support I need from colleagues (Saya mendapat bantuan dan dukungan yang saya butuhkan dari rekan kerja saya)	1.829	0.872	0.719	0.738	
I receive the respect I deserve from my colleagues at work (Saya dihargai oleh rekan kerja saya)	1.749	0.767	0.684	0.762	
My colleagues are willing to listen to my work-related problems (Rekan-rekan saya bersedia untuk mendengarkan masalah terkait pekerjaan saya)	1.853	0.922	0.591	0.795	
Relationship					0.728
There is friction or anger between colleagues at work (Ada gesekan atau kemarahan antara rekan di tempat kerja)	2.773	1.128	0.504	0.675	
I am subject to personal harassment in the form of verbal harassment or bad behaviour at work (Saya mengalami pelecehan berbentuk kata-kata atau tingkah laku yang buruk ditempat kerja)	2.028	1.195	0.609	0.609	
I am subject to bullying at work (Saya mengalami bullying di tempat kerja)	1.517	0.880	0.611	0.636	
Interpersonal relationships at work are strained (Hubungan antar personal ditempat kerja terasa dibuat-buat/tidak alami)	2.431	1.287	0.403	0.746	
Role					0.781
I am clear what is expected of me at work (Saya paham dengan apa yang diharapkan dari saya di tempat kerja)	1.839	0.874	0.517	0.759	
I am clear about the goals and objectives of my department (Saya paham tujuan dan sasaran departemen saya)	1.735	0.876	0.587	0.732	
I know how to get my job done (Saya tahu bagaimana cara menyelesaikan pekerjaan saya)	1.460	0.619	0.594	0.733	
I am clear about my duties and responsibilities are (Saya paham akan tugas dan tanggung jawab saya)	1.374	0.567	0.470	0.768	
I understand how my work fits into the overall aims of the organization (Saya memahami bagaimana pekerjaan saya sesuai dengan tujuan keseluruhan organisasi)	1.559	0.750	0.666	0.702	
Change					0.691
When there is a change in the workplace, the staff is also consulted (Ketika terjadi perubahan ditempat kerja, staff turut diajak bicara mengenai perubahan tersebut)	1.825	1.043	0.431	0.705	
I have sufficient opportunities to speak with my managers about changes at work (Saya memiliki peluang yang cukup untuk bertanya kepada atasan tentang perubahan-perubahan di tempat kerja)	1.967	0.943	0.563	0.526	
When changes are made at work, I am clear how they will work out in practice (Ketika perubahan dibuat, saya paham bagaimana perubahan tersebut akan diaplikasikan di tempat kerja saya)	1.900	0.902	0.536	0.565	

Table 3. Validity Analysis Results

Construct	Mean	SD	1	2
HSE Work Related Stress Scale	141.2	14.366	-	
Employee Well-Being	108.9	16.655	-0.414*	-
Neuroticism	11.8	4.153	0.344*	-0.439**

(0.819), relationship (0.728), role (0.781), and change (0.691).

Each item on the demands dimension had a Crit value between 0.275 and 0.691, the control dimension had a value between 0.307 and 0.659, the managerial support dimension had a value between 0.350 and 0.447, the colleague support dimension had a value between 0.591 and 0.719, the relationship dimension had a value between 0.403 and 0.609, and the role dimension had a value between 0.403 and 0.609. These results indicate that the Indonesian version of HSE-WRSS has quite good reliability.

Validity Analysis

The validity measure utilized in this study was convergent validity, which was determined by comparing the HSE-WRSS measuring instrument to two related variables, namely employee well-being and neuroticism. Table 3 contains the results of the convergent validity investigation.

Based on the correlation test above, there was a significant positive association between HSE-WRSS and employee well-being ($r = 0.302$, $p = 0.011$) and a significant negative relationship between HSE-WRSS and neuroticism trait ($r = -0.311$, $p = 0.037$). These results mean that a higher score of HSE-WRSS indicates lower stress among individuals, and a lower stress level of an employee indicates higher employee well-being. In addition, the lower the stress of an individual, the lower their neuroticism.

DISCUSSION

The dependability of the HSE-WRSS varies between 0.637 and 0.819 for each dimension, and this range demonstrates an adequate level of reliability (Taber, 2018). Additionally, the results of the convergent validity indicate that the stress construct measured by the Indonesian version of the HSE-WRSS is significantly correlated with employee well-being and the neuroticism trait,

indicating that this tool is valid for measuring work stress constructs among Indonesian employees.

Two aspects in this study had low values, namely management support (0.637) and change (0.691). These findings contrast with earlier research that indicated the lowest reliability levels on various metrics. Magnavita (2012) found that the relationship dimension had the lowest dependability (0.75), and Edwards *et al.* (2008) found the same thing (0.78). The discrepancy between these results is that this study was conducted in a collectivistic Indonesian society, whereas previous research was conducted in Italian and British civilizations. According to Hofstede and Hofstede (2005), individuals prone to uncertainty avoidance dislike things that change, even though the dimension of change is inextricably linked to items associated with change. The same is true for the management support dimension. Certain items have low criterion values, such as in "I have sufficient opportunities to speak with my manager about changes at work." Indonesians also tend to maintain a professional distance from their superiors, as evidenced by the item in the managerial assistance dimension, that is "I can trust my supervisor to assist me in resolving work problems." Numerous cultures in Indonesian parental culture, such as Javanese and Minangkabau, stress the importance of etiquette. These two tribes develop an appreciation for the importance of decorum, as well as obedience to and respect for parents (Wiswanti *et al.*, 2020). Supervisors at work might be viewed as parents, and as a result, employees maintain a distance from their superiors at work, owing to their emphasis on etiquette.

According to Toderi and Balducci, (2010), the relationship dimension had the lowest dependability, at 0.76. The disparity in the results occurred because their study was based on a sample of service organizations in Italy, with 82 percent of the sample consisting of male participants. The difference could be due to gender variance, although the number of male and female sex participants was not significantly different in this study.

Additionally, the reliability tests' findings indicate that the dependability results with a high value were noted in the dimension of demands (0.819). In contrast to previous research (Kerr, McHugh and McCrory, 2009), the dependability value for the managerial support dimension was 0.88. The disparity in these results occurred because they used most female participants (82 percent). Different jobs lead to different results on the most

critical reliability dimension of this study. Previous research used a sample with a specific sort of job, white-collar, with an office climate conducive to feeling supported by superiors. Meanwhile, this study used a model with a more blue-collar type of work; for example, participants in this study worked as ride-hailing online drivers.

The validity of this measuring instrument to evaluate work stress was also determined using the convergent test with two related constructs, namely the EWB-Indonesia and the neuroticism trait. Association analysis of HSE-WRSS and EWB-Indonesia data revealed a substantial positive correlation. The study's findings corroborate Vandiya and Etikariena's (2018) research showing that work stress has a major impact on the welfare of white-collar professionals. Most workers in this study were blue-collar, and the findings corroborate previous studies on white-collar workers.

The connection between HSE-WRSS and neuroticism characteristics was then found to be significantly positive. This result is consistent with findings of Primasari *et al.* (2020) that neuroticism makes individuals more susceptible to work stress. Because the neuroticism trait is a personality type that is less tolerant of disappointment and incapable of experiencing difficulties, individuals with this personality type are prone to feel nervous, tense, and anxious. Individual psychological states, such as anxiety and tension, suggest that individuals experience stress.

This research gives sound results regarding the Indonesian version of HSE-WRSS, although there are still some limitations left. First, the convergent validity analysis only consisted of just 37 participants collected. Although Johanson and Brooks (2010) believe that this number is sufficient for research on developing early measuring tools, they still stated that a larger sample size would be preferable.

Additionally, the ratio of participants to the type of job was unbalanced, with 132 blue-collar participants and 78 white-collar participants, making it impossible to summarize the results thoroughly. Additionally, this study's drawback is based on a blue-collar population. HSE-RSS was previously used more extensively in research on white-collar work. White-collar workers typically engage in a more significant amount of mental work. The type of work is more varied, and decision-making can be done independently, allowing for career advancement. In contrast, blue-collar workers face

labour market segmentation based on competence, limiting their prospects (Cillo *et al.*, 2019).

CONCLUSION

This study shows that the HSE-WRSS Indonesian version has good reliability and validity to measure Indonesian employees' work stress. The Indonesian version of the HSE-WRSS measuring instrument can be used in future studies conducted by Indonesian researchers to accurately measure work-related stress and to examine the relevant items to be applied to Indonesian samples. This scale was adapted to assist organizations in identifying the primary hazards contributing to work stress, preventing the hazards, and identifying the causes of work stress early enough to intervene.

Further studies and implications need to be employed for more robust studies. For future study, it is recommended to increase the number of study samples because this study examines two distinct types of labour and employs additional validation analyses, such as criterion validity by connecting the criteria for stressed workers. In addition, it is prudent to conduct additional research on blue collars and white collars, as there are few conversations regarding these two subjects.

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