

Workforce agility in startup employees: The role of psychological empowerment, emotional intelligence and job autonomy

Hasna Uzzakiyah^{1*}, Galang Lufityanto²

¹Faculty of Psychology, Ahmad Dahlan University, Yogyakarta, Indonesia ² Department of Psychology, College of Liberal Arts, Wenzhou-Kean University Corresponding author: hasna@psy.uad.ac.id

ARTICLE INFO

Article history

Received September 10, 2024 Revised February 08, 2025 Accepted February 12, 2025

Keywords

Emotional Intelligence Job Autonomy Psychological Empowerment Startup Workforce Agility

ABSTRACT

Workforce Agility (WFA) is crucial for startup companies, particularly in unexpected situations. Research shows that WFA significantly contributes to an organization's ability to thrive amidst uncertainty and competitive challenges. WFA can be influenced by both internal and external factors. In this study, psychological empowerment (PE) and emotional intelligence (EI) are represented the internal factors, while job autonomy (JA) served as the external factor. This research aims to explore the relationships between PE and EI on WFA with JA as grouping variable. A quantitative approach was utilized, involving 180 employees from various startups. Multiple regression analysis was conducted to assess the relationships between PE, EI, and WFA, categorized into three levels of JA. The results indicated that PE and EI simultaneously have a significant positive impact on WFA. The model explained 52% of the variance $(R^2 = 0.52, F=93.8, p < 0.01)$. The study concluded that enhancing PE and EI among startup employees can improve their WFA. However, when JA levels segmented participants, only those in the low and medium JA groups exhibited a relationship between PE and EI on WFA. Thus, PE and EI can only increase WFA in subjects with low and medium level of JA.

This is an open access article under the CC BY-SA license.



Introduction

A competitive market, unexpected situations, and fast-paced changes are faced by companies nowadays (Varshney & Varshney, 2020) especially in the post-COVID era. This situation forces organizations to swiftly adapt to the challenges and opportunities in the unstable business environment (Alviani et al., 2024). Due to this situation, employee capability should be increased by companies to respond to the changing environment. Workforce Agility (WFA) is defined as the ability of workers to respond to rapid environmental changes and is divided into three aspects: proactivity, adaptability, and resilience (Sherehiy & Karwowski, 2014). It is considered vital for individuals facing dynamic situations and maintaining a competitive edge. According to the data, WFA has been proven to help companies adopt New Ways of Working (NWW) in manufacturing companies in response to the changing environment (Cornelis & Febriansyah, 2023). In the small and medium-sized enterprises (SME) sector, WFA is also recognized for helping companies survive and grow post-



pandemic by implementing cross-training, work design, and employee empowerment techniques within the organization (Elanthi & Dhanabhakyam, 2021).

Although WFA has become necessary for companies to respond quickly to changes, the literature examining WFA in the startup sector is limited. At the same time, it is known that the number of startups in Indonesia has been growing each year. Unfortunately, not all startups in Indonesia achieve success in the first year. A study shows that a high startup failure rate is faced by Indonesia, with 75% being confronted with difficulties in scaling their business (Afdi & Purwanggono, 2017). According to the study, the failures of startups in Indonesia are attributed to the lack of appropriate team capabilities to build a business, caused by a lack of experience in dealing with change, difficulty finding investors, and a lack of business experience (Singgih & Sari, 2024). Therefore, a team with high WFA is required in the startup sector for long-term business continuity.

A preliminary study indicated that WFA is needed for startups in Indonesia. Environmental changes have made it necessary for startups in Indonesia to change products or services to survive (CNN Indonesia, 2020). Therefore, it was revealed by several startups in preliminary studies that they need people who are innovative, creative, and adaptable (resource person-1), employees who are willing to act without being ordered by superiors, flexible to change (resource person-2), and employees who can complete tasks quickly, effectively, without reducing the quality of work (resource person-3). The conclusion of the preliminary study shows that the changing business direction in startups requires Human Resources (HR) that are listed in aspects of WFA (Sherehiy & Karwowski, 2014).

Based on previous research, WFA is more studied from the external side, such as the role of technology (Youndt et al., 1996), organizational structure (Alavi et al., 2014), and work organization (Sherehiy, 2008). On the other hand, WFA literature that discusses the internal side of individuals is still limited. Individual internal factors need to be developed so that individuals can increase independence in work and not depend on environmental factors (Thomas & Velthouse, 1990). Internal factors in employees play a more significant role in eliciting expected behavior in the work environment than external factors (Olafsen et al., 2015). This is because internal factors arise within the individual due to liking and satisfaction with the work done. Meanwhile, external factors depend on environmental factors that encourage individuals to work (Beqiri, 2019). This internal factor is essential, especially when companies face significant changes. Of course, this also impacts startup companies, which are considered the most vulnerable actors in the world economy (Kuckertz et al., 2020). Therefore, companies must pay attention to individual internal factors to produce optimal performance even when the company undergoes system changes.

Internal factors in this study are represented by Psychological Empowerment (PE), known to enhance WFA. Previous research has demonstrated that PE contributes to increasing WFA among the public and private sectors (Muduli & Pandya, 2018). However, this relationship has not yet been explored in startup companies. PE is defined as an individual's intrinsic motivation to perform their work role, comprising four cognitive factors: meaning, competence, impact, and self-determination. Individuals with high PE are often capable of working independently without depending on direction and rewards from others (Thomas & Velthouse, 1990). Consequently, their task completion speed increases, their initiative in problem-solving grows, and their resilience when facing challenges improves (Thomas & Velthouse, 1990). The influence of PE on WFA is also shaped by the provision of Job Autonomy (JA) to employees (Scott & Bruce, 1994). JA allows employees to make decisions and complete tasks independently without overly relying on superiors. This autonomy positively impacts PE, as employees feel that they feel the sufficient ability to tackle problems (Wang & Netemeyer, 2002). The individual motivation to solve problems

independently can expedite responses to environmental changes (<u>Condry & Chambers</u>, <u>1978</u>), because guidance and coordination from superiors are unnecessary (<u>Gunasekaran</u>, <u>1999</u>).

Emotional Intelligence is another internal factor that can influence WFA (Hosein & Yousefi, 2012). Emotional Intelligence (EI) refers to the capacity to manage one's emotions and respond suitably to the feelings of others. It encompasses four key aspects: self-awareness, self-control, self-motivation, empathy, and social relationships (Goleman, 1998). People with high EI often adapt more readily to different situations (Goleman, 1998). Thus, EI is seen as a crucial factor when individuals face rapid changes in the organizational environment (Vakola et al., 2004). By understanding their own emotions and others, individuals can communicate ideas and goals more effectively (Vakola, 2013), enabling organizations to better prepare for competitive situations (Hosein & Yousefi, 2012). The relationship between EI and WFA is also influenced by how the organization provides JA to employees. JA allows individuals to express genuine emotions and encourages proactive behavior (Cooper & Sawaf, 1997). Conversely, individuals who are not given JA are limited in expressing emotions due to their fear of a response from supervisors or superiors. Therefore, JA is needed to develop fundamental emotional reactions and encourage employees to take the initiative in responding to environmental changes.

Based on theoretical studies, WFA is considered as a factor that startup employees must have when facing dynamic changes (Sherehiy & Karwowski, 2014). Employees with a high WFA are likely to see a change as a challenge and take positive opportunities from the change (Zhang & Sharifi, 2000). Internal factors such as PE and EI are known to increase WFA (Hosein & Yousefi, 2012; Muduli & Pandya, 2018). In addition, external factors such as JA is considered to influence the role of PE and EI on WFA (Abraham, 2000; Scott & Bruce, 1994). This study aims to determine the role of PE and EI on WFA in all subjects and to examine the role of PE and EI on WFA based on JA type, especially in startup companies. In the future, this research can be used as a reference for startup companies that want to develop WFA based on individual internal and external factor.

Existing research on WFA has predominantly explored PE and EI separately, with limited attention to their combined effects. This study investigates the gap by integrating PE & EI into WFA. Additionally, while prior studies have primarily treated WFA as a general trait, this study considers how different levels of JA shape these relationships. Furthermore, unlike most studies that are conducted on WFA in the manufacturing sector, this study extends the investigation to startup companies, offering new insight into WFA within dynamic work environments.

Based on previous theoretical studies, the hypothesis is stated as follows: (1) PE and EI impact on WFA across subjects; (2) PE and EI impact on WFA for subjects with low JA; (3) PE and EI impact on WFA for subjects with medium JA; and (4) PE and EI impact on WFA for subjects with high JA

Method

This research method utilized a quantitative approach by distributing surveys through the Google Form application. In this research, PE and EI were considered predictor variables that positively influence the criterion variable WFA. Meanwhile, JA was used as a grouping variable, affecting the impact of PE and EI on WFA. The JA variables were categorized into low, medium, and high levels.

Participants

The study's population comprised startup employees actively working for the company. A purposive sampling technique was utilized, focusing on employees with specific characteristics: those working at startups for 0 to 5 years, involved in technology services, exhibiting a dynamic organizational culture, having completed their probation period, and aged between 20 and 35. It has been noted that most young employees in this age prefer working at startups due to the opportunities for career growth, risk-taking culture, and high levels of innovation that appeal to young employees (Ouimet & Zarutskie, 2014).

Table 1

Category	Low JA (%)	Medium JA (%)	<u>High JA (%)</u>	<u>Total (%)</u>	
	N=30	N=114	N=36	N=180	
Gender					
Man	61.5%	57.9%	77.8%	61%	
Woman	38.5%	42.1%	22.2%	39%	
Employee Status					
Full Time	90%	86%	88.9%	87%	
Part Time	3.3%	7.9%	5.6%	7%	
Freelance	6.7%	6.1%	5.6%	6%	
Startup Type					
TO	13.3%	19.3%	19.4%	19%	
E-Commerce	10%	14%	2.8%	11%	
Service	23.3%	28.1%	33.3%	28%	
Education	10%	12.3%	13.9%	12%	
Tourism	16.7%	5.3%	11.1%	8%	
Other	26.7%	21.1%	19.4%	22%	
Length of work (years)	1				
0 - 1	46.7%	61.4%	66.7%	60%	
1 - 2	33.3%	22.8%	25%	25%	
2 - 3	3.3%	12.3%	2.8%	9%	
3 - 4	6.7%	2.6%	5.6%	4%	
>4	10%	0.9%	0%	2%	

Characteristics of the Research Subject

Note: % = percentage; JA = Job Autonomy

The total number of subjects in this research is 180 employees who are currently working in a startup companies. The sample size was determined based on the recommendations of Hair et al. (2010) who indicated that the minimum required sample size for regression analysis depends on the number of independent variables. They stated that each independent variable requires a minimum total sample of 15 to 20 subjects. Therefore, the inclusion of 180 subjects was appropriate for this research. The full characteristics of the subject can be seen in Table 1 and Table 2

Table 2

Advanced Characteristics of Research Subjects

Variable	All Data		Low	Low JA		Medium JA		High JA	
	R	SD	Distance	R	SD	R	SD	R	SD
WFA	121.53	15.49	88-161	108.93	12.65	120.36	12.45	135.75	15.61
PE	49.29	4.67	35-60	44.63	4.57	48.43	4.88	55.88	4.38
EI	38.77	5.92	28-52	36.90	3.23	38.32	3.95	41.72	6.30

Note: R = average; SD = Standard deviation; JA = Job Autonomy; WFA = Workforce Agility; PE = Psychological Empowerment; EI = Emotional Intelligence

Instruments

The WFA scale in this study utilizes a version adapted by the Mind, Brain & Behavior Laboratory at the Faculty of Psychology, Universitas Gadjah Mada. This scale consists of 23 items reflecting proactivity, adaptability, and resilience. The WFA scale's validity is based on the content validity of Aiken V, which has a threshold value of 0.63 (Aiken, 1985). The test results indicate that the Aiken V values range from 0.75 to 0.97 demonstrating validity. The WFA scale was administered to 60 subjects with characteristics similar to the participants. The results show that the reliability of Cronbach's Alpha is 0.89, indicating it is reliable or consistent (Gudmundsson, 2009). This scale is assessed using a 7-point Likert scale, ranging from 1 (never) to 7 (always).

The scale used to measure PE is based on Spreitzer (1995) which was adapted by Nastiti (2015). This scale consists of 12 items that represent four aspects: meaning, competence, self-determination, and impact. The validity of the PE scale is determined using Aiken V content validity, with a minimum value of 0.63 (Aiken, 1985). Test results indicate that the Aiken V value for the PE scale ranges from 0.79 to 1.00, which is considered valid. The PE scale was administered to 60 subjects with characteristics similar to the participants. The results show that the reliability, as measured by Cronbach's Alpha, is 0.92, which is regarded as reliable or consistent (Gudmundsson, 2009). Responses on this scale are evaluated using a 5-point scale that ranges from 1 (very inappropriate) to 5 (very appropriate).

The scale used to measure EI refers to Goleman et al. (2007) adapted by Santyafatni (2018). This scale consists of 13 items representing five aspects: self-awareness, motivation, self-regulation, empathy, and relationship management or social skills. The validity of the EI scale utilizes Aiken V content with a value threshold of 0.63 (Aiken, 1985). The test results show that the Aiken V value on the EI scale moves from 0.76 - 0.84, which is considered valid. The EI scale was tested on 60 subjects with the same characteristics as the study subjects. The results show that the reliability of Cronbach Alpha is 0.70, which is considered reliable or consistent (Gudmundsson, 2009). The response in this scale is measured using a 4-point scale with a range of 1 (very inappropriate) to 4 (very appropriate).

The scale for measuring JA is based on Breaugh (1985) and was adapted by Saragih (2011). The JA scale includes 9 items that represent three aspects: work methods, work scheduling, and work criteria. Saragih (2011) stated that the JA scale has satisfactory goodness fit indices for the context of workers in the industrial field. Based on the CFA results, this scale has an RMSEA of 0.00, a CFI of 1.00, and a TLI of 1.03. The value indicates that this scale has been constructively validated. The JA scale was tested on 60 subjects with the same characteristics as the study subjects. The results show that the reliability of Cronbach Alpha is 0.81, which is considered reliable or consistent (Gudmundsson, 2009). Responses on this scale were measured using a 7-point scale ranging from 1 strongly disagree to 7 strongly agree.

Data Analysis

The data analysis used in this study was multiple linear regression to determine the role of PE and EI on WFA. Next, to assess the role of PE and EI on WFA within the JA category, the data analysis employed was multiple regression with multigroup. Before performing regression, this study tested assumptions: residual normality, multicollinearity and linearity. Statistical analysis was conducted using the Statistical Package for Social Science (SPSS) program version 25.

Results

The categorization of research data is carried out using an empirical approach that uses references to subject data. The categorization used is by dividing the data into three levels according to (Azwar, 2011). The results of data categorization are listed in Table 3.

Table 3

Number of subjects based on data categorization of each variable

Category	Formula	WFA	PE	EI	JA
Low	X < M-1 SD	26	20	21	30
Medium	M-1 $SD X < M$ +1 SD	127	120	124	114
High	M+1SD X	27	40	35	36

Note: X: sample raw score; M: average distribution in sample; SD: standard deviation; WFA = Workforce Agility; PE = Psychological Empowerment; EI = Emotional Intelligence; JA = Job Autonomy.

The correlation matrix in this study is listed in Table 4. The results show that the EI positively correlated with the WFA variable of 0.53 (p<0.01). The PE positively correlated with the WFA variable of 0.67 (p<0.01), while the PE and EI simultaneously positively correlated with the WFA of 0.45 (p<0.01).

Table 4

Correlation Matrix of Predictor Variables to Criteria Variables

Variable	М	SD	1	2
WFA	121.53	15.49		
EI	38.77	4.67	0.53**	
PE	49.29	5.92	0.67**	0.45**
N	1 .0.01 *		0D 01 1 1D 1	WEANA A

Note: **significant with p < 0.01; *significant with p < 0.05; M=Mean; SD=Standard Deviation; WFA=Workforce Agility; PE=Psychological Empowerment; EI=Emotional Intelligence

To answer hypothesis 1 in this study, the analysis used is multiple regression analysis, while to answer hypotheses 2 - 4, the analysis used is multiple regression analysis with multigroup. The results of the analysis are summarized in Table 5.

Table 5

0	-							
JA	Ν	EI	p-value	PE	p-value	R-Squared	F	df
All Data	180	0.28^{**}	<i>p</i> < 0.01	0.54^{**}	<i>p</i> < 0.01	51.5%	93.8	2.18
Low	30	0.42^{**}	<i>p</i> < 0.01	0.44^{**}	<i>p</i> < 0.01	47.4%	12.14	2.27
Medium	114	0.28^{**}	<i>p</i> < 0.01	0.46**	<i>p</i> < 0.01	35.3%	30.26	2.11
High	36	0.30	<i>p</i> = 0.09	0.34	<i>p</i> = 0.06	31.6%	7.62	2.33

Regression Analysis Results

Note: ** significant with p < 0.01; * significant with p < 0.05; PE=Psychological Empowerment; EI=Emotional Intelligence; JA=Job Autonomy

Table 5, results from the multiple regression analysis indicated that variations in the PE and EI variables could account for 52% of the variations in the WFA variables across all subjects. Meanwhile, another 48% were influenced by other variables not included in this research. This study demonstrates that PE and EI significantly impact on WFA, with values of (F=9.38; p<0.01). Additionally, EI accounted for a role of 0.28 (p<0.01) and PE accounted for 0.54 (p<0.01) in relation to WFA. An increase of 1 unit in the standard deviation of EI will lead to an increase of 0.28 units in the standard deviation of the WFA score, while an increase of 1 unit in the standard deviation of PE will result in an increase of 0.54 units in the

standard deviation of the WFA score. Therefore, the study's results support the first hypothesis, indicating the impact of PE and EI on WFA.

Table 5 indicates that, for subjects with low JA, variations in the PE and EI variables accounted for 47% of the variations in the WFA variables, while the remaining 53% were influenced by factors not included in this research model. In the low JA category, both PE and EI significantly contribute to WFA with values (F= 12.14; p<0.01). Additionally, EI has a role of 0.42 (p<0.01), while PE's role is 0.44 (p<0.01) in relation to WFA. An increase of 1 unit in standard deviation of EI will result in an increase of 0.42 units standard deviation of WFA score, while an increase of 1 standard deviation of PE will lead to an increase of 0.44 units in the standard deviation of WFA score.

Additionally, the analysis results indicated that both PE and EI significantly impacted on the moderate JA category. In the subject category with moderate JA, the variation in PE and EI variables explained 35% of the variation in WFA variables, while the remaining 65% was influenced by variables not included in this research model. In the medium JA category, PE and EI together play a significant role in WFA with values (F= 30.26; p< 0.01). Furthermore, EI has a role of 0.28 (p< 0.01) and PE of 0.46 (p<0.01) to WFA. That is, an increase of 1 standard deviation in EI will result in an increase of 0.28 units standard deviation of WFA score, while an increase of 1 standard deviation of PE will lead to an increase of 0.46 units in the standard deviation of WFA score.

Meanwhile, the analysis results indicated that PE and EI did not significantly contribute to WFA in the high JA category. In addition to the hypothesis test, further analyses were conducted to determine the average differences of each variable across JA categories. Additional analyses performed using ANOVA analysis techniques are listed in Table 6.

Variable	JA Category	Ν	Average	F	df	Р
	Low	30	44.63	51.15	2	<i>p</i> < 0.01
PE	Medium	114	48.44		177	
	High	36	55.89			
	Low	30	36.90	11.27	2	<i>p</i> < 0.01
EI	Medium	114	38.33		177	_
	High	36	41.72			
	Low	30	108.93	35.10	2	<i>p</i> < 0.01
WFA	Medium	114	120.36		177	-
	High	36	135.75			

Table 6

Summary of additional analyses of PE, EI and WFA variables from all JA categories

Table 6 presents analysis results showing that in general there are significant JA category differences (p<0.01) in PE variables (F= 51.15; p<0.01); EI variables (F= 11.27; p<0.01) and WFA variables (F= 35.10; p<0.01) where the high JA category has the highest value among other categories.

Discussion

This research examines the role of PE and EI to WFA based on JA level among employees working in startup companies in technology services. The majority of subjects involved in this study were male, worked full time, engaged in technological services and worked for less than one year.

The results found that there is a positive relationship between PE and WFA in all startup employees. Individuals with high PE tend to have high intrinsic motivation in doing work. High intrinsic motivation can make individuals feel empowered and able to make a major contribution to the organization. This perception is what keeps individuals motivated to contribute proactively and flexibly in the face of change without orders from superiors. Conversely, individuals with low PE feel less empowered and able to contribute to the organization, so initiative and proactive behavior do not naturally arise in individuals.

The results of this study support the findings of several studies regarding the relationship between PE to WFA in employees both in the public and private sectors (Muduli & Pandya, 2018), in which intrinsic motivation in work can lead to proactive and resilient behavior (Thomas & Velthouse, 1990), and also intrinsically motivated individuals will do work without fixating on external factors, rather it is due to the internal impulse of the individual (Ryan & Deci, 2000). Thus, even though organizations undergo system changes, people with high intrinsic motivation still perform best in the work environment.

PE becomes an important factor that needs to be developed to improve WFA, especially when startup companies face significant environmental changes. Significant changes can impact changes in organizational systems such as changes in working hours, technology systems (<u>Gigauri, 2020</u>), and salary reductions due to the recession (<u>Estrada, 2020</u>). This change will certainly affect employee well-being, so it impacts decreasing performance (<u>Gigauri, 2020</u>). Therefore, startups need to increase intrinsic motivation that can encourage individuals to do work activities because the work is meaningful to them. This satisfaction will later be rewarded internally for individuals, so they do not have to rely on external rewards to motivate them to work.

Other findings in the study suggest that EI plays a positive role in WFA. The positive results of EI's role in WFA can be explained in several ways. First, for startup workers, facing change has become a daily routine (Hamel & Välikangas, 2003). This change requires employees to be able to quickly adjust to existing changes and provide innovation to the company's progress. These demands sometimes make some employees depressed and stressed because it is not easy for them to work with several possibilities and uncertain situations. However, individuals with high EI tend to be able to understand their emotions, making it easier for them to manage stress, anxiety, and worry that arise when facing pressure. Second, when confronting change, startup companies need good teamwork, so that employees can respond to changes more effectively. Individuals with high EI tend to cooperate with colleagues, because they can respond appropriately to other people's emotions and communicate ideas and goals effectively (Vakola, 2013). Thus, individuals with high EI can help organizations to be better prepared for competitive situations (Hosein & Yousefi, 2012).

The third finding in this study revealed that PE and EI together play a significant role in WFA only in the low and medium JA categories. However, PE and EI did not significantly increase WFA in the high JA category. In addition, this study found that the results of the ANOVA test on the average variables PE, EI and WFA in each JA category showed significant differences. From these data, it shows that the high JA category has the highest average of PE, EI, and WFA compared to other categories.

In the context of startup companies, PE and EI have insignificant roles in increasing WFA among employees with the high JA category can be caused by several things. Employees with high JA tend to have full control over the work (<u>Nie et al., 2023</u>). This allows them to make decisions regarding the work they do. PE involves feelings of control and influence over one's work. Thus, employees with high levels of JA already have significant control in making decisions regarding their work, which is a major component of PE. Therefore, additional PE may not provide a significant control or influence for employees

with high JA. On the other hand, EI doesn't play a significant role in increasing WFA. This is because employees with high JA, like CEOs, tend to have greater responsibilities than those with low and medium JA. They are responsible for making decisions and guiding organizations toward long-term objectives (<u>Papadakis, 2006</u>). This explanation demonstrates that employees with high JA need other skills to boost WFA rather than improving EI.

However, this study has some limitations; specifically, it involves subjects who work in startup companies, which vary significantly in valuation levels in Indonesia. In fact, differences in valuation levels also influence variations in subject characteristics among startup companies. Additional research is necessary to identify the level of startup will be studied, ensuring that the results are more representative of specific types of startups. The results of this study indicated among employees with high JA, PE and EI did not influence WFA. Further research is anticipated to investigate other factors, such as strategic thinking, leadership, and the capability to forecast the market, which are likely to enhance agility in employees with high JA.

Conclusion

Psychological empowerment and emotional intelligent play a role in workforce agility in startup employees. Meanwhile, psychological empowerment and emotional intelligent play a role in workforce agility only in the low and medium job autonomy categories, while the high job autonomy category does not show a significant role of psychological empowerment and emotional intelligent in workforce agility.

Declarations

Author contribution. First author: idea conceptualization, review literature, data collection, and writing the article. Second author: guide the research framework, review and improve the manuscript.

Funding statement. This research was conducted with independent funding from author. **Conflict of interest.** The authors declare no conflict of interest.

Additional information. No additional information is available for this paper.

References

- Abraham, R. (2000). The role of job control as a moderator of emotional dissonance and emotional intelligence–outcome relationships. *The Journal of Psychology*, *134*(2), 169–184. <u>https://doi.org/10.1080/00223980009600860</u>
- Afdi, Z., & Purwanggono, B. (2017). Designing a strategy based on the lean startup method to encourage the growth of technology-based startups in Indonesia. *Industrial Engineering Online Journal*, 6(4), 1–13. https://ejournal3.undip.ac.id/index.php/ieoj/article/view/20398
- Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement*, 45(1), 131–142. <u>https://doi.org/10.1177/0013164485451012</u>
- Alavi, S., Abd. Wahab, D., Muhamad, N., & Arbab Shirani, B. (2014). Organic structure and organisational learning as the main antecedents of workforce agility. *International Journal of Production Research*, 52(21), 6273–6295. https://doi.org/10.1080/00207543.2014.919420

- Alviani, D., Hilmiana, Widianto, S., & Muizu, W. O. Z. (2024). Workforce agility: A systematic literature review and research agenda. *Frontiers in Psychology*, 15. <u>https://doi.org/10.3389/fpsyg.2024.1376399</u>
- Azwar, S. (2011). Attitudes and behavior in: Human attitudes theory and measurement. Pustaka Pelajar.
- Beqiri, T. (2019). Empirical study on intrinsic motivation factors of employees in transition economies. *International Journal of Economics and Business Administration*, 7(4), 307–319. <u>https://doi.org/10.35808/ijeba/345</u>
- Breaugh, J. A. (1985). The measurement of work autonomy. *Human Relations*, *38*(6), 551–570. <u>https://doi.org/10.1177/001872678503800604</u>
- CNN Indonesia. (2020, November 4). Pandemi Covid-19 ubah cara dan gaya berbisnis. CNN Indonesia. https://www.cnnindonesia.com/ekonomi/20201104090800-97-

565666/pandemi-covid-19-ubah-cara-dan-gaya-berbisnis

- Condry, J., & Chambers, J. (1978). Intrinsic motivation and the process of learning. In M.R. Lepper & D. Greene (Eds.), *The hidden costs of reward: New perspectives on the psychology of human motivation* (pp. 61–84). Erlbaum.
- Cooper, R. K., & Sawaf, A. (1997). *Executive EQ: Emotional intelligence in business*. Orion Business Books.
- Cornelis, F. C. P. N., & Febriansyah, H. (2023). The importance of new ways of working to influence workforce agility in the manufacturing sector for managing destructive situation. Asia Pacific Management and Business Application, 11(3), 263–282. https://doi.org/10.21776/ub.apmba.2023.011.03.1
- Elanthi, M. B., & Dhanabhakyam, M. (2021). Sustaining SMEs and entrepreneurial innovation in the Post-Covid-19 era. In *Agile workforce a post pandemic revival plan for SMEs* (pp. 1–18). <u>https://doi.org/10.4018/978-1-7998-6632-9.ch001</u>
- Estrada, M. A. R. (2020). Economic waves: The effect of the Wuhan Covid-19 on the world economy (2019-2020). *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3545758
- Gigauri, I. (2020). Effects of covid-19 on human resource management from the perspective of digitalization and work-life-balance. *International Journal of Innovative Technologies in Economy*, 4(31), 1–10. https://doi.org/10.31435/rsglobal_ijite/30092020/7148

- Goleman, D., Boyatzis, R., & McKee, A. (2007). *The emotional leaders*. Gramedia Pustaka Utama.
- Gudmundsson, E. (2009). Guidelines for translating and adapting psychological instruments. *Nordic Psychology*, *61*(2), 29–45. <u>https://doi.org/10.1027/1901-2276.61.2.29</u>
- Gunasekaran, A. (1999). Enablers of total quality management implementation in manufacturing: A case study. *Total Quality Management*, 10(7), 987–996. https://doi.org/10.1080/0954412997172
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* with readings (7th ed.). Prentice Hall International.
- Hamel, G., & Välikangas, L. (2003). The quest for resilience. *Harvard Business Review*, 81(9), 52–131. <u>https://pubmed.ncbi.nlm.nih.gov/12964393/</u>

Goleman, D. (1998). Working with emotional intelligence. Bloomsbury.

- Hosein, Z. Z., & Yousefi, A. (2012). The role of emotional intelligence on workforce agility in the workplace. *International Journal of Psychological Studies*, 4(3), 48–61. https://doi.org/10.5539/ijps.v4n3p48
- Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Morales Reyes, C. A., Prochotta, A., Steinbrink, K. M., & Berger, E. S. C. (2020). Startups in times of crisis – A rapid response to the Covid-19 pandemic. *Journal of Business Venturing Insights*, 13, e00169. <u>https://doi.org/10.1016/j.jbvi.2020.e00169</u>
- Muduli, A., & Pandya, G. (2018). Psychological empowerment and workforce agility. *Psychological Studies*, 63(3), 276–285. <u>https://doi.org/10.1007/s12646-018-0456-8</u>
- Nastiti, A. (2015). Job satisfaction in terms of psychological empowerment and organizational learning capability. Gadjah Mada University.
- Nie, T., Tian, M., Cai, M., & Yan, Q. (2023). Job autonomy and work meaning: Drivers of employee job-crafting behaviors in the VUCA times. *Behavioral Sciences*, 13(6), 493. <u>https://doi.org/10.3390/bs13060493</u>
- Olafsen, A. H., Halvari, H., Forest, J., & Deci, E. L. (2015). Show them the money? The role of pay, managerial need support, and justice in a self-determination theory model of intrinsic work motivation. *Scandinavian Journal of Psychology*, 56(4), 447–457. https://doi.org/10.1111/sjop.12211
- Ouimet, P., & Zarutskie, R. (2014). Who works for startups? The relation between firm age, employee age, and growth. *Journal of Financial Economics*, *112*(3), 386–407. https://doi.org/10.1016/j.jfineco.2014.03.003
- Papadakis, V. M. (2006). Do CEOs shape the process of making strategic decisions? Evidence from Greece. *Management Decision*, 44(3), 367–394. <u>https://doi.org/10.1108/00251740610656269</u>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <u>https://doi.org/10.1037/0003-066X.55.1.68</u>
- Santyafatni, K. M. (2018). *The role of social support and emotional intelligence on worklife balance*. Gadjah Mada University.
- Saragih, S. (2011). The effects of job autonomy on work outcomes: Self efficacy as an intervening variable. *International Research Journal of Business Studies*, 4(3), 203– 215. <u>https://doi.org/10.21632/irjbs.4.3.203-215</u>
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580– 607. <u>https://doi.org/10.2307/256701</u>
- Sherehiy, B. (2008). *Relationships between agility strategy, work organization and workforce agility*. ProQuest.
- Sherehiy, B., & Karwowski, W. (2014). The relationship between work organization and workforce agility in small manufacturing enterprises. *International Journal of Industrial Ergonomics*, 44(3), 466–473. <u>https://doi.org/10.1016/j.ergon.2014.01.002</u>
- Singgih, R. P., & Sari, M. P. (2024). The urgency of agile leadership training to produce competitive startups in the Vuca era. *Journal of Ilmiah Global Education*, 5(2), 1162– 1169. <u>https://doi.org/10.55681/jige.v5i2.2765</u>
- Spreitzer, G. M. (1995). Psychological, empowerment in the workplace: Dimensions, measurement and validation. Academy of Management Journal, 38(5), 1442–1465. <u>https://doi.org/10.2307/256865</u>

- Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive" model of Intrinsic task motivation. *The Academy of Management Review*, *15*(4), 666–681. <u>https://doi.org/10.2307/258687</u>
- Vakola, M. (2013). Multilevel readiness to organizational change: A conceptual approach. *Journal of Change Management*, *13*(1), 96–109. <u>https://doi.org/10.1080/14697017.2013.768436</u>
- Vakola, M., Tsaousis, I., & Nikolaou, I. (2004). The role of emotional intelligence and personality variables on attitudes toward organisational change. *Journal of Managerial Psychology*, 19(2), 88–110. <u>https://doi.org/10.1108/02683940410526082</u>
- Varshney, D., & Varshney, N. K. (2020). Workforce agility and its links to emotional intelligence and workforce performance: A study of small entrepreneurial firms in India. *Global Business and Organizational Excellence*, 39(5), 35–45. <u>https://doi.org/10.1002/joe.22012</u>
- Wang, G., & Netemeyer, R. G. (2002). The effects of job autonomy, customer demandingness, and trait competitiveness on salesperson learning, self-efficacy, and performance. *Journal of the Academy of Marketing Science*, 30(3), 217–228. <u>https://doi.org/10.1177/00970302030003003</u>
- Youndt, M. A., Snell, S. A., Dean, JR., J. W., & Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal*, 39(4), 836–866. <u>https://doi.org/10.2307/256714</u>
- Zhang, Z., & Sharifi, H. (2000). A methodology for achieving agility in manufacturing organisations. *International Journal of Operations & Production Management*, 20(4), 496–513. <u>https://doi.org/10.1108/01443570010314818</u>