



THE INFLUENCE OF CHALLENGE STRESSORS AND JOB DEMAND ON CREATIVITY OF ONLINE RIDE-HAILING DRIVERS: MEDIATING ROLE OF WORK ENGAGEMENT

Utari Muthia Azzahra¹⁾, Handrio Adhi Pradana²⁾, Andriyastuti Suratman³⁾
16311063@students.uui.ac.id, handrio.pradana@uui.ac.id, andri_suratman@uui.ac.id
Management Department, Faculty of Business and Economics, Universitas Islam Indonesia

Abstract

This research intends to ascertain the impact of work engagement as mediator that affect relationships between challenge stressors and job demand toward employee creativity. The sample size of 120 respondents in this quantitative study were online ride-hailing drivers from Go-Jek, Grab, Shopee-Food, and Maxim who were located across some major cities and regions in Indonesian. Purposive sampling is used to collect the required data for analysis, and Google Forms are used to distribute surveys and questionnaire in online fashion. The result shows that challenge stressors has a positive and significant influence on creativity and work engagement, as well as the impact of job demand on creativity and especially for work engagement is not significant, then mediation role of work engagement did not confirm this relationship. Moreover, work engagement mediates the relationship of challenge stressors toward creativity.

Keywords: Challenge Stressors, Job Demand, Work Engagement, Creativity, Ride-hailing Drivers

INTRODUCTION

Basically, one's creative thinking ability can produce technological developments and innovative discoveries that can advance nations and countries. This is very much needed to improve the quality of human resources in the current of globalization era. Creativity is one of the abilities aimed at in the era of globalization in developing for the better advancement and productivity. According to Celume et al. (2019), creative thinking is a thinking process that has some characteristics of fluency, flexibility, originality, and detailing or elaboration. Creativity is often also called creative thinking, that is the use of cognitive activities or thought processes to generate new and useful ideas with purpose to get better in almost human activities.

The underlying elements that affect employees' creativity in organizations determine the paths of innovations that the organization would embrace (Amabile & Pratt, 2016). It means that there is something related to work engagement that is important for aspects in a business to be able to face a market competition related to every individual in an organization. Employees can show creativity because they are involved in work engagement according to their respective skills and creativity. The higher work engagement employee can show, the more creativity should be enriched well. From the various creativity given to the employees, it can affect their work engagement significantly.

Basically, challenge stressors are known as 'eustress', and job demands generally have a positive and beneficial effect on employees because they can be productive at work. Example for job that stressful to do is troubleshooter. Troubleshooting is a job-related demand or situation that has a tendency to interfere with or hinder the employee's job accomplishment and is positively related to potential loss (Bakker, 2011). High workloads, job demands, and time constraints are examples of stressors for

drivers that can lead to increased employee job performance. Therefore, this study aim to investigate the influence of challenge stressors and job demand on creativity of online transportation drivers and to examine whether mediating effect of work engagement between the relationship of challenge stressors and job demand toward employee creativity.

LITERATURE REVIEW

The work environment is characterized by a sense of responsibility and a desire to help others make employees think outside the box and generate creative ideas to be able to solve problems that exist in the company. Work engagement is a state of well-being, and employees achieve this state by being optimistic, fulfilled and motivated while performing job duties (Flynn et al., 2003). Enhanced work engagement motivates employees to engage in proactive and risk taking behaviors provoked by the intrinsic desire to solve challenging social and organizational problems (Hanaysha, 2016).

Performance drivers can be influenced by the presence of challenges stressors at work. Challenges stressors can have a positive impact on the psychological and biological conditions of online transportation drivers (Zhang et al., 2019). The positive impact is that all online drivers can work harder because there are challenged in achieving targets. The work engagement factor is no unimportant in improving the performance of online transportation drivers. Work engagement has an effect on attitudes and work behavior. Reis et al. (2017) also showed that time pressure had significant and positive direction on vigor and absorption; both vigor and absorption are indicators of engagement. Challenges stressors that employees can get equally provide positive energy to feel balance and good development in work engagement.

In this study, with quantitative model approach used, the authors take data

on online transportation drivers because the authors can understand deeply how online transportation drivers perform their work and solver the problem emerged so that customers are always comfortable, safe, and enjoyed the trip or services (Jack, 2020). Online transportation must be able to generate creativity in their work so that they can continue to work well, they must be friendly with every customer. Online transportation drivers are also experiencing stressor challenges because of this pandemic, income is decreasing, so therefore they have to do work in a positive way, that is looking for references so that they do not experience bad side of challenges stressors that happens chronically (Kang & Jang, 2019).

According to Almunawar et al. (2021), transportation is the transfer of people or goods by humans or machines using means that are moved from one place to another. Based on data from the Central Bureau of Statistics (BPS), motor vehicles have four types of vehicles, namely passenger cars, buses, goods cars, and motorcycles. Of the four types of vehicles, the one that has the highest number is motorcycles, with the number up to 2017 being 113,030,793 (Central Bureau of Statistics, 2019). The platforms made in online ride-hailing application that was initially developed in Indonesia, namely Go-jek, and this platform is followed then by several others platform as competitor in online ride-hailing industry.

Online transportation is one form of application-based technology development in modern times, which is well received by the public because it has been considered one of the best product innovations since its inception until now. Consumers prefer online transportation because it is considered cheaper and faster (Munandar & Munthe, 2019). In relationship with the model, several researchers assume that the relationship between job demands and work engagement will increase when supported by close relatives at work, this is in line with the result which raises the assumption that

social support may moderate the effect of job demands on work engagement (Antwi et al., 2019). From this understanding, the authors believe that challenge stressors and job demand will increase either creativity and work engagement in positive ways. Then, work engagement can play mediating role between the relationship of challenge stressors and job demand toward creativity.

Table 1. Summary of Hypothesis Formulation

| Hypothesis | Statement |
|-------------------|--|
| H1 | Challenge stressors affects positive and significant on creativity |
| H2 | Challenge stressors affects positive and significant on work engagement |
| H3 | Job demand affects positive and significant on creativity |
| H4 | Job demand affects positive and significant on work engagement |
| H5 | Work engagement affects positive and significant on creativity |
| H6 | Work engagement mediates the relationship between challenge stressors and creativity |
| H7 | Work engagement mediates the relationship between job demand and creativity |

RESEARCH METHODS

Purposive sampling was the method of sampling utilized in this research, which uses quantitative approach. Purposive sampling is a technique for selecting research samples with specific goals in mind, resulting in more representative data (Sekaran & Bougie, 2019). In this study, data of sample size required for analysis

include 120 online transportation drivers from the cities of Palembang, Yogyakarta, Madiun, Pontianak, and Bekasi.

Research surveys are filled out via online using Google Forms, and all responses are recorded using Likert scale with a range of five points, from strongly disagree (1-point) to strongly agree (5-point). The Confirmatory Factor Analysis (CFA) approach was used as the analytical strategy for this study to test the validity. Reliability of the construct is examined using Cronbach's Alpha technique. Then the authors test structural model using regression linear analysis with Sobel method to test if there is mediation effect of work engagement (Creswell, 2014). All of this analysis is conducted in SPSS version 25 program.

RESULTS AND DISCUSSION

Respondent Profiles

From the results of descriptive analysis has been generated using 120 respondents who work as online transportation drivers. In the descriptive results conducted by the researchers, most of them are male, with 104 (86.7%) people, and also most of these respondents have an age or age range of 21–30 years, with as many as 76 (63.3%) people. Then an average of 86 (71.7%) unmarried respondents with dominant education background were high school/vocational, with a total of 84 (70.0%) people. For the work tenure, average respondent has a length of work of 1-3 years, with a total of 54 (45.0%) people. Most of the respondents

in this study did not become online transportation drivers as a permanent job, with 71 (59.2%) respondents. And for the platform most used by the respondents work for, that is Go-Jek, with a total of 44 (36.7%) respondents. Finally, the highest income was in the range of Rp. 10,000,000 – Rp. 3,000,000, with a total of 62 (51.7%) respondents.

Furthermore, the researchers collected descriptive research data on respondents profiles and identify the influence of challenge stressors and job demand on creativity mediated by work engagement. From descriptive result of the variables in the model, it shows that the mean score of Challenge Stressors (X1) 3.59, Job Demand (X2) 3.41, Work Engagement (Z) 3.81, Employee Creativity (Y) 3.95. It implies that descriptive data of variables show high degree in the perception of each variables answered by the drivers.

Instrumentation Testing

Validity test is used to measure construct validity or validity of a questionnaire. Based on Table 2., it shows that the variable of challenge stressors, job demand, work engagement, and creativity fulfill the validity test because the loading factor value is all above 0.5. There is no issue about cross-loading because the researchers have deleted some items that face cross-loading problem and then re-run data reduction in SPSS (Sekaran & Bougie, 2019). Final result of CFA technique can be seen completely in Table 2 below.

Table 2. Validity Test Result^a

| Variables | Indicator^b | Loading Factor |
|--------------------------|------------------------------|-----------------------|
| Challenge Stressors (CS) | CS4 | 0.711 |
| | CS5 | 0.807 |
| | CS7 | 0.750 |
| Job Demand (JD) | JD4 | 0.816 |
| | JD6 | 0.879 |
| Work Engagement (WE) | WE2 | 0.762 |
| | WE3 | 0.781 |

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|-----------------|-----|-------|
| | WE4 | 0.813 |
| | WE5 | 0.778 |
| | WE6 | 0.755 |
| | WE7 | 0.780 |
| | WE8 | 0.800 |
| | WE9 | 0.725 |
| Creativity (CR) | CR1 | 0.714 |
| | CR2 | 0.900 |
| | CR3 | 0.856 |
| | CR4 | 0.783 |

Total variance explained refers to 4 factor as much as 68.362%.

^aRotated component matrix.

Extraction Method: Principal component analysis.

Rotation Method: Varimax with kaiser normalization.

^bRotation converged in 6 iterations.

Table 3. Reliability Test Result

| Variables | Cronbach's Alpha |
|--------------------------|------------------|
| Challenge Stressors (CS) | 0.786 |
| Job Demand (JD) | 0.757 |
| Work Engagement (WE) | 0.929 |
| Creativity (CR) | 0,876 |

Table 4. Assumption Test Result

| Variables | Normality | Multicollinearity |
|--------------------------|-----------------------|--|
| Challenge Stressors (CS) | Normal ($p > 0.05$) | Tolerance 0.544 > 0.10 VIF 1.340 < 10 |
| Job Demand (JD) | Normal ($p > 0.05$) | Tolerance 0.151 > 0.10 VIF 1.340 < 10 |
| Work Engagement (WE) | Normal ($p > 0.05$) | Tolerance 1.315 > 0.10 VIF 1.340 < 10 |
| Creativity (CR) | Normal ($p > 0.05$) | Tolerance 1.032 > 0.10 VIF 1.340 < 10 |

Table 5. Regression Linear Result Summary

| Variables | Coefficient B | Sig. | Adjusted R Square ^a |
|---|---------------|----------|--------------------------------|
| Challenge Stressors -> Creativity (H1) | 0.219 | 0.005** | 0.058 |
| Challenge Stressors -> Work Engagement (H2) | 0.507 | 0.000*** | 0.285 |
| Job Demand -> Creativity (H3) | 0.178 | 0.005** | 0.056 |
| Job Demand -> Work Engagement (H4) | 0.193 | 0.188 | 0.006 |
| Work Engagement -> Creativity (H5) | 0.169 | 0.005** | 0.264 |

N = 120

^aAdj R Square means coefficient of determination that is represented by a percentage.

* $p < 0.05$; ** $p < 0.001$; *** $p < 0.000$

Table 6. Sobel Test Result

| Indirect Effect Relationship | T-Statistic | One-Tailed Probability | Two-Tailed Probability |
|---|--------------------|-------------------------------|-------------------------------|
| Challenge Stressors -> Work Engagement -> Creativity (H6) | 4.15 | 0.00001631 | 0.00003263*** |
| Job Demand -> Work Engagement -> Creativity (H7) | 1.30 | 0.09748797 | 0.19497593 |

$N = 120$

* $p < 0.05$; ** $p < 0.001$; *** $p < 0.000$

Table 3. shows that Cronbach's Alpha represent satisfactory results because all of these variables are reliable, that is all of score > 0.6 . Table 4. shows a good normality value, and a good multicollinearity value too, because all of Tolerance score of those variables > 0.10 and Variance Inflated Factor (VIF) < 10 . So, it can be implied that there is some serious issue about collinearity.

Table 5. shows that there are four hypotheses that is stated significant consist of H1, H2, H3, and H5. But there is one relationship between variables that has insignificant results, that is job demand on work engagement, H4. Supported hypotheses is indicated by the significance of p -value, which has a value below 0.05.

Table 6. shows that all relationships between variables with indirect effect have two-tailed probabilities of 0.00003263 and 0.19497593. Thus, it can be concluded that there is a partially mediation effect between challenge stressors and creativity that is mediated by work engagement, so H6 is significant proven. But for H7, work engagement can not be able to mediate relationship between job demand and creativity.

Challenge Stressors on Creativity

From the results of the hypothesis that Challenge Stressors have carried out on Creativity, there is a positive and

significant influence with a total of 120 samples. From the results of the tests that have been carried out, there is an adjusted R Square value of 0.066 with a regression coefficient of 0.219 and P-Value of $0.005 < 0.05$ so that the results of H_0 are rejected and H_1 is accepted.

As seen in previous and current research, it obtained significant results. In a study conducted by Nguyen et al. (2018) regarding the relationship between challenge stressors and creativity in six organizations located in China in the manufacturing industry, they found a positive and significant variable relationship.

Challenge Stressors on Work Engagement

The results of the hypothesis that Challenge Stressors have been carried out on Work Engagement, there is a positive and significant influence with a sample size of 120. It can be seen from the results of the tests that have been carried out that the Adjusted R Square value is 0.291 with a regression coefficient of 0.507 and P-Value of $0.000 < 0.05$ so that the results of H_0 are rejected and H_2 is accepted.

Previous studies had positive and significant results in journals related to challenge stressors on work engagement, that is study of Karatepe et al. (2014) with the results of distributing questionnaires to frontline employees at five-star hotels in North Cyprus having significant results between challenge stressors and creativity.

Job Demand on Creativity

The results of the hypothesis that job demand on creativity has been carried out, there is a positive and significant influence with a sample size of 120. From the results of the tests that have been carried out, it can be seen that if seen from the results of the regression linear, which has a regression coefficient of 0.278 and a P-Value of $0.005 < 0.05$, so the results H_0 are rejected and H_3 is accepted.

Previous research had positive and significant results in journals related to job demand on creativity, that is study of Sacramento et al. (2013) with the results of distributing questionnaires to 304 employee supervisors, had supported positive result of job demand toward creativity.

Job Demand on Work Engagement

The results of the hypothesis that job demand has on work engagement has been carried out, there is an insignificant effect with a sample size of 120. The results are not significant, as can be seen from the results of the tests that have been carried out, it can be seen from the results of the calculator above, which has a adjusted R Square value of 0.015 with a regression coefficient of 0.093 and a P-Value of > 0.05 . So, H_4 is not supported.

The findings indicate that the outcomes H_0 is accepted and H_4 is rejected may be seen from (t count $>$ t table), it is demonstrating how the demands of the job do not significantly influence work involvement. The demands of the job include hypothetical circumstances, psychological circumstances, social circumstances, and organizational circumstances (Choi et al., 2015). Therefore, job demand does not significant influence work engagement maybe because facing several situations of many aspect that affecting job demand itself.

Work Engagement on Creativity

The results of the hypothesis that Creativity has on work engagement has been carried out, there is an insignificant effect with a sample size of 120. From the results of the tests that have been carried out, it can be seen that if seen from the results of the calculator above, which has a regression coefficient of 2,455 and a P-Value of $0.005 < 0.05$, So, H_5 is supported.

Previous studies had positive and significant results in journals related to work engagement on creativity, that is study of Tran (2021) with the results of distributing questionnaires to 255 employee supervisors in Vietnam, had a positive result of work engagement toward creativity.

Mediation of Work Engagement between Relationship Challenge Stressors and Creativity

The results of the hypothesis that Challenge Stressors on Creativity mediated by Work Engagement have a positive and significant effect with a sample size of 120. From the results of the tests that have been carried out, it can be seen that if seen from the results of the Sobel test, which has a two-tailed probability result, that is produced is $0.000561 > 0.05$, so the mediating effect of H_6 is supported.

Previous studies have had positive and significant results in journals related to challenge stressors on creativity mediated by work engagement, that is research of Jiang et al. (2020), with the results of distributing questionnaires to hotel employees in North China having same positive and significant results with the current study.

Mediation of Work Engagement between Relationship Job Demand and Creativity

The result shows that Sobel test does not confirm mediation effect of work engagement toward the relationship between job demand and creativity. If viewed from Table 6 above, which has a two-tailed probability result that is generated is $0.194 > 0.05$. So, work engagement does not act as a mediator in the relationship between job demand and creativity. Therefore, H7 is not proven statistically significant.

According to research done by Demerouti et al. (2015) and Hulshof et al. (2020), work engagement does not act as a mediator between the effect of job demand and creativity. However, this study agrees with Petrou et al. (2012) who claimed that stating the demand for jobs could also have a negative impact rather than positive impact toward performance and productivity.

CONCLUSION

Based on the research findings and discussions, a few conclusions can be drawn as follows: Challenge Stressors have a significant positive effect on Creativity, Challenge Stressors have a significant positive effect on Work Engagement, Work Engagement has positive and significant effect on Creativity, Job Demand has no significant effect on Work Engagement, Job Demand have a significant effect on Creativity, Work Engagement mediates relationship between Challenge Stressors and Creativity but it does not mediate for the relationship between Job Demand and Creativity.

REFERENCES

- Almunawar, M. N., Anshari, M., & Ariff Lim, S. (2021). Customer acceptance of ride-hailing in Indonesia. *Journal of Science and Technology Policy Management*, 12(3), 443-462. <https://doi.org/10.1108/JSTPM-09-2019-0082>
- Amabile, T. M., & Pratt, M. G. (2016). *The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning*. *Research in Organizational Behavior*, 36, 157-183. <https://doi.org/10.1016/j.riob.2016.10.001>
- Antwi, C. O., Fan, C. J., Aboagye, M. O., Brobbey, P., Jababu, Y., Affum-Osei, E., & Avornyo, P. (2019). Job demand stressors and employees' creativity: A within-person approach to dealing with hindrance and challenge stressors at the airport environment. *The Service Industries Journal*, 39(3-4), 250-278. <https://doi.org/10.1080/02642069.2018.1520220>
- Badan Pusat Statistik (2019). *Perkembangan Jumlah Kendaraan Bermotor Menurut Jenis, 1949-2017*. Retrieved from <https://www.bps.go.id/linkTableDinamis/view/id/1133>.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265-269. <https://doi.org/10.1177/0963721411414534>
- Celume, M. P., Besançon, M., & Zenasni, F. (2019). Fostering children and adolescents' creative thinking in education. *Theoretical model of drama pedagogy training*. *Frontiers in Psychology*, 9, 2611. <https://doi.org/10.3389/fpsyg.2018.02611>
- Choi, S. B., Tran, T. B. H., & Park, B. I. (2015). Inclusive leadership and work engagement: Mediating roles of affective organizational commitment and creativity. *Social Behavior and Personality: An International Journal*, 43(6), 931-943. <https://doi.org/10.2224/sbp.2015.43.6.931>
- Creswell, J. W. (2014). *Research Design*.

- Qualitative, Quantitative, and Mixed Methods Approaches*. United Kingdom: SAGE Publications.
- Demerouti, E., Bakker, A. B., & Gevers, J. M. (2015). Job crafting and extra-role behavior: The role of work engagement and flourishing. *Journal of Vocational Behavior*, 91, 87-96. <https://doi.org/10.1016/j.jvb.2015.09.001>
- Flynn, M., Dooley, L., O'sullivan, D., & Cormican, K. (2003). Idea management for organisational innovation. *International Journal of Innovation Management*, 7(04), 417-442. <https://doi.org/10.1142/S1363919603000878>
- Hanaysha, J. (2016). Improving employee productivity through work engagement: Evidence from higher education sector. *Management Science Letters*, 6(1), 61-70. <http://dx.doi.org/10.5267/j.msl.2015.11.006>
- Hulshof, I. L., Demerouti, E., & Le Blanc, P. M. (2020). Day-level job crafting and service-oriented task performance. *Career Development International*, 25(4), 355-371. <https://doi.org/10.1108/CDI-05-2019-0111>
- Jack, M. (2020). The socio-spatial installed base: Ride-hailing applications, parking associations, and precarity in tuk tuk driving in Phnom Penh, Cambodia. *The Information Society*, 36(5), 252-265. <https://doi.org/10.1080/01972243.2020.1805247>
- Jiang, Q., Lee, H., & Xu, D. (2020). Challenge stressors, work engagement, and affective commitment among Chinese public servants. *Public Personnel Management*, 49(4), 547-570. <https://doi.org/10.1177/0091026020912525>
- Kang, J., & Jang, J. (2019). What do employees perceive as hindrance or challenge stressors in the hotel industry? The role that hope plays. *Journal of Human Resources in Hospitality & Tourism*, 18(3), 299-322. <https://doi.org/10.1080/15332845.2019.1599783>
- Karatepe, O. M., Beirami, E., Bouzari, M., & Safavi, H. P. (2014). Does work engagement mediate the effects of challenge stressors on the job outcomes? Evidence from the hotel industry. *International Journal of Hospitality Management*, 36(1), 14-2. <https://doi.org/10.1016/j.ijhm.2013.08.003>
- Munandar, J. M., & Munthe, R. C. F. (2019). How Technology Affects Behavioral Intention (Case Study of Online Transportation in Indonesia and Thailand). *The South East Asian Journal of Management*, 13(2), 222-236.
- Nguyen, N. N., Takahashi, Y., & Nham, T. (2018, July). Challenge stressors and creativity: moderating effect of emotional intelligence. In *Academy of management proceedings* (Vol. 2018, No. 1, p. 13774). Briarcliff Manor, NY 10510: Academy of Management.
- Petrou, P., Demerouti, E., & Schaufeli, W. B. (2012). Crafting a Job on a Daily Basis : Contextual Correlates and the Link to Work Engagement: Daily Job Crafting. *Journal of Occupational Health Psychology*, 33(8), 1120-1142. <https://doi.org/10.1002/job.1783>
- Reis, D., Hoppe, A., Arndt, C., & Lischetzke, T. (2017). Time pressure with state vigour and state absorption: Are they non-linearly related? *European Journal of Work and Organizational Psychology*, 26(1), 94-106. <https://doi.org/10.1080/1359432X.2017.1359432>

16.1224232

Sacramento, C. A., Fay, D., & West, M. A. (2013). *Workplace Duties or Opportunities? Challenge Stressors, Regulatory Focus, and Creativity. Organizational Behavior and Human Decision Processes*, 121, 141-157. <https://doi.org/10.1016/j.obhdp>.

Sekaran, U., & Bougie, R. (2019). *Research Methods For Business: A Skill Building Approach. United Kingdom: Wiley*.

Tran, D. K. (2021). *What Should Automobile Businesses in Vietnam Care to Make Employee Creativity?. Eurasian Studies in Business and Economics*, 17(1), 39-56. https://doi.org/10.1007/978-3-030-65147-3_3

Zhang, K., Jia, X., & Chen, J. (2019). *Talent management under a big data induced revolution: The double-edged sword effects of challenge stressors on creativity. Management Decision*, 57(8), 2010-2031. <https://doi.org/10.1108/MD-06-2018-0711>