

The Influence of Emotional Intelligence and Flow at Work on Innovative Work Behavior in MSME Entrepreneurs

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Article Information

Submitted date 16-11-2023
Revised date 18-03-2024
Accepted date 18-03-2024

Keywords:

entrepreneurs;
emotional intelligence;
innovative work behavior;
flow at work.

Kata kunci:

wirausaha;
kecerdasan emosional;
perilaku kerja inovatif;
flow at work.

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Abstract

Innovative work behavior is an essential factor for entrepreneurial success. This research aims to examine (1) how emotional intelligence influences innovative work behavior, (2) how flow at work influences innovative work behavior, and (3) how emotional intelligence and flow at work influence innovative work behavior. The population of this research is MSME entrepreneurs in the city of Malang. Through a purposive sampling technique, 124 entrepreneurs were obtained as samples in this research with the criteria of having been in business for two years or more, having a business in the MSME category, and being under the guidance of the Department of Industry and Trade Cooperatives in Malang City. The scales used are the Innovative Work Behavior (IWB), Assessing Emotion Scale (AES), and WORK-reLated Flow inventory (WOLF). The validity of the items in this research used Pearson correlation, and the reliability of the instruments on the three scales was measured using Cronbach's alpha formula. The results of statistical techniques of multiple regression analysis showed that emotional intelligence and flow at work significantly influence innovative work behavior, both partially and simultaneously. Partially, emotional intelligence contributes 17.4% to innovative work behavior. Meanwhile, flow at work can explain innovative work behavior variables by 16%. Simultaneously, these two variables influence 24.9% of innovative work behavior.

Abstrak

Perilaku kerja yang inovatif merupakan faktor penting bagi keberhasilan wirausaha. Penelitian ini bertujuan untuk menguji (1) bagaimana kecerdasan emosional mempengaruhi perilaku kerja inovatif, (2) bagaimana *flow at work* mempengaruhi perilaku kerja inovatif, dan (3) bagaimana kecerdasan emosional dan *flow at work* mempengaruhi perilaku kerja inovatif. Populasi penelitian ini adalah pengusaha UMKM yang ada di kota Malang. Melalui teknik *purposive sampling*, diperoleh 124 pengusaha sebagai sampel dalam penelitian ini dengan kriteria sudah menjalankan usaha selama dua tahun atau lebih, memiliki usaha kategori UMKM, dan berada di bawah binaan Dinas Koperasi Perindustrian dan Perdagangan di Kota Malang. Skala yang digunakan adalah skala Innovative Work Behavior (IWB), Assessing Emotion Scale (AES), dan WORK-reLated Flow inventory (WOLF). Validitas item dalam penelitian ini menggunakan korelasi Pearson, dan reliabilitas instrumen pada ketiga skala diukur menggunakan rumus *Cronbach's alpha*. Hasil teknik statistik analisis regresi berganda menunjukkan bahwa kecerdasan emosional dan *flow at work* berpengaruh signifikan terhadap perilaku kerja inovatif, baik secara parsial maupun simultan. Secara parsial, kecerdasan emosional memberikan kontribusi sebesar 17,4% terhadap perilaku kerja inovatif, sedangkan *flow at work* mampu menjelaskan variabel perilaku kerja inovatif sebesar 16%. Secara simultan kedua variabel tersebut berpengaruh sebesar 24,9% terhadap perilaku kerja inovatif.



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INTRODUCTION

Entrepreneurship is a business sector that has a vital influence on Indonesia's economic development. Based on 2019 data from the Ministry of Cooperatives and Small and Medium Enterprises (Indonesian: *Kementerian Koperasi dan Usaha Kecil dan Menengah*), the workforce absorbed by Micro, Small, and Medium Enterprises (shortened as MSMEs, Indonesian: *Usaha Mikro, Kecil, dan Menengah*) was recorded at 117 million people (Sasongko, 2020). It absorbs more workforce than large companies, including *Badan Usaha Milik Negara* (shortened as BUMN, English: State-Owned Enterprises). On the other hand, entrepreneurship faces many challenges in its survival, such as the impact of the COVID-19 pandemic, high levels of competition, and rapid changes. A company's survival positively correlates with innovative work behavior and is one of the attributes of entrepreneurial success. Businesses that survive consistently change their innovation portfolio to adapt to changing conditions and environments (Fiksel, 2015). Thus, it is crucial to carry out further studies regarding innovative work behavior in entrepreneurs to survive and adapt to various changes and challenges.

Innovative work behavior is generally understood as creative ideas that are implemented, described as a gradual, multi-dimensional process where individuals in an organization behave to create new concepts after exploring various existing possibilities. This process includes the process of planning from implementation to execution by continuing to ensure that the ideas and actions required are sustainable, following the company's interests in the long term (Lambriex-Schmitz et al., 2020). Innovative work behavior is also described as individual behavior that creates and introduces new ideas in work roles, groups, or organizations (de Jong & den Hartog, 2010).

Along with technological developments and various changes over time, the paradigm for developing innovation in business and industry has also experienced a change in orientation. The traditional centralized research and development orientation is now transformed into the principle of "connect and develop", companies are more open in opening up their connections to various external resources, collaborating with multiple parties, and research can be carried out from various branches and regions, without relying on research and centralized (Bonesso et al., 2021). As changes occur in the distribution of more complex innovation models, employees with emotional intelligence who can understand and manage themselves and others are needed. Abilities such as building and maintaining social relationships and being fully aware of the current situation facilitate individuals' creative thinking and create innovation.

Emotional intelligence refers to the ability to identify and manage one's emotions and those of others (Goleman, 2000). Individuals who have emotional intelligence can quickly bounce back from pressure and direct their positive energy to constructive activities and thus experience positive emotions (Khan et al., 2021; Wong & Law, 2012). These positive emotions encourage someone to explore new information and expand their horizons, consistent with innovative behavior (Csikszentmihalyi, 1990). However, there is still debate regarding these two things. Some researchers argue that innovative solutions are more likely to be achieved when they do not involve emotions and use more logical thinking (Stanovich & West, 2000). This aligns with research by Ivcevic, Brackett, and Mayer (2007), which found no significant relationship between emotional intelligence, creativity, and emotional creativity.

These positive emotions can also be experienced when individuals experience flow. Flow is generally defined as an optimal experience. Csikszentmihalyi (1990) describes it as a holistic and dynam-

ic sensation experienced by a person when carrying out an activity with total involvement. Flow and innovative work behavior have similar elements, namely positive emotions and intrinsic motivation. In flow conditions, employees will experience pleasant feelings and intrinsic motivation while working (Schiepe-Tiska & Engeser, 2021). Therefore, a flow that brings positive emotions will help employees to generate creative ideas. In addition, employees who work in flow conditions will have more intrinsic motivation and devote their energy to developing creative ideas (Khan et al., 2021).

Based on the explanation above, researchers see the importance of researching to explore further the relationship between emotional intelligence and innovative work behavior in MSMEs entrepreneurs. Research related to these two variables is still mostly carried out on employees, and more needs to be done on entrepreneurs who are required to have innovative work behavior in more complex processes. It is also necessary to look at the relationship between flow at work and innovative behavior, especially when raised simultaneously with emotional intelligence. So far, research related to flow and innovative work behavior has still been carried out on creative and professional workers but has not been carried out on entrepreneurs. In this research, we will see how emotional intelligence and flow influence each dimension of innovative work behavior.

METHODS

The population of this research is entrepreneurs who meet the criteria for MSMEs in Malang City and are still actively carrying out entrepreneurial activities. The researcher used a purposive sampling technique in taking research samples, which had the following criteria: (1) having run an entrepreneurial business for two years or more; and (2) being an entrepreneur under the guidance of the Industry and Trade Cooperative Service (Indonesian: *Dinas Koperasi Perindustrian dan Perdagangan*) in Malang City. Based on these criteria, 124 entrepreneurs were obtained as samples in this research.

Three instruments were used in this research. This research's measurement of emotional intelligence adapted the Assessing Emotion Scale (AES) developed by Schutte et al. (2009). This scale consists of four dimensions: perception of emotions, managing emotions in the self, managing others' emotions, and utilizing emotions. AES uses a Likert model scale with a range of four points using a scale of 1 (strongly agree) to 4 (strongly disagree). The instrument used to measure the flow at work variable is an adaptation of the Work-related Flow inventory (WOLF) by Bakker (2008). WOLF consists of three core components: (1) absorption, which refers to the intensity of involvement and concentration in an activity; (2) enjoyment, which refers to the enjoyment obtained when carrying out an activity; and (3) intrinsic motivation, which refers to the internal motivation that encourages carrying out an activity. Furthermore, to measure innovative work behavior using the scale developed by de Jong and den Hartog (2010) and adapted by Rosyiana et al. (2020), which includes four dimensions: idea exploring, idea generating, idea championing, and idea implementation.

Item validity is used to examine the research's validity. Item validity can be determined by evaluating the correlation between individual and total items. Items 5, 6, and 33 of the emotional intelligence scale were omitted from the analysis since their significance value exceeded .05 and had a Pearson correlation coefficient of just .326. Items 1, 2, and 4 were removed from the work-related flow scale due to their statistical insignificance ($p > .05$) and poor Pearson correlation coefficients ($r < .35$). The validity and reliability adaptation of the innovative work behavior scale were tested with confirmatory factor analysis in prior research (Rosyiana et al., 2020) and were fit for usage with a loading factor estimate of .674–.978. Reliability testing used Cronbach's alpha formulation on the submitted AES and WOLF items. Cronbach's alpha coefficient for the AES is .911, while for the WOLF, it is .748.

RESULTS

The hypothesis test examining the impact of flow at work on innovative work behavior yielded a significance value of .00, below the conventional threshold of .05. Table 1 shows that the constant in this regression model is 20.986, and the beta value of the flow variable is .298. Based on this, the resulting regression analysis equation is $Y = 20.986 + (.298X)$. Flow positively affects innovative work behavior because the regression coefficient value is positive. This means the level of innovative work behavior will increase when flow increases. More specifically, when the flow value increases by one point, the innovative work behavior value will increase by .298. The table above shows how much the flow variable can explain the innovative work behavior variable. The table shows that the adjusted R-squared (R^2) value obtained was .16. This means that the flow at work variable can explain 16% of the innovative work behavior variable, while other causes outside the model explain 84%.

Table 1.
Hypothesis 1 Testing Result

Variables	Adjusted R ²	β	Sig.
Constant	-	20.986	
Flow at Work → Innovative Work Behavior	.160	.298	.000

The hypothesis test examines the impact of emotional intelligence on innovative work behavior. Its significance value is .00, below the conventional threshold of .05.

Table 2.
Hypothesis 2 Testing Result

Variables	Adjusted R ²	β	Sig.
Constant	-	12.232	
Emotional Quotient → Innovative Work Behavior	.174	.039	.000

Based on this table, it is known that the significance value obtained is .00, which is smaller than .05 ($.00 < .05$), which shows a significant influence of emotional intelligence on innovative work behavior. The table shows that the constant in this regression model is 12.232, and the beta value of the emotional quotient variable is .039. Based on this, the resulting regression analysis equation is $Y = 12.232 + (.039X)$. Because the regression coefficient value is positive, emotional intelligence positively affects innovative work behavior. This means innovative work behavior will increase when the emotional quotient increases. More specifically, when the emotional intelligence value rises by one point, the innovative work behavior value will increase by .039. The table above shows how much the emotional quotient variable can explain the innovative work behavior variable. In the table, it can be seen that the adjusted R² value obtained was .174. This value means that the emotional quotient variable can explain 17.4% of the innovative work behavior variable, while other causes outside the model explain 82.6%.

In the third hypothesis test, which measures how the influence of flow at work and emotional intelligence simultaneously influences innovative work behavior, it was found that these two variables have a significant impact, with the significance value obtained being .00, where this significance value is smaller than .05 ($.00 < .05$). Table 3 shows that the constant in this regression model is 6.421, the beta value of the flow variable is .220, and the beta value of the emotional quotient variable is .156. Based on this, the resulting regression analysis equation is $Y = 6.421 + (.220X_1) + (.156X_2)$. Because the regression coefficient value is positive, emotional quotient and flow positively affect innovative work behavior. This means that innovative work behavior will increase when emotional quotient and flow

at work increase. More specifically, when the flow value increases by one point, the innovative work behavior value will increase by .220. When the emotional quotient value increases by one point, the innovative work behavior value will increase by .156. How much the emotional quotient and flow at work variables can explain the innovative work behavior variable can be seen in Table 3. In this table, it can be seen that the adjusted R² value obtained was .249. This value means that the emotional quotient and flow at work variables can explain 24.9% of the innovative work behavior variable, while other causes outside the model explain 75.1%.

Table 3.
Hypothesis 3 Testing Result

Variables	β	Sig.	Adjusted R ²
Constant	6.421	.000	.249
Flow	.220		
Emotional Quotient	.156		

DISCUSSION

The findings of this research demonstrate that all three hypotheses have been confirmed. The theory of emotional intelligence highlights that persons with good emotional management skills are more likely to exhibit adaptability in the face of change and demonstrate innovative responses to obstacles. This indicates that emotional intelligence plays a crucial role in influencing the innovative work behavior of entrepreneurs in MSMEs. Entrepreneurs with high emotional intelligence can more effectively deal with pressure and obstacles, see them as innovative opportunities, and thus increase the likelihood of innovation in their businesses.

Research conducted by Dincer and Orhan (2012) found a positive relationship between emotional intelligence and innovative work behavior in managers. Dincer and Orhan found that individuals can better develop and implement new ideas in a work process with emotional intelligence. Changing the innovation development model to be more open, collaborative, and involving various parties requires individuals in organizations who can understand and manage themselves and others and focus on the current situation. This facilitates the emergence of creative thinking (Bonesso et al., 2021).

Furthermore, the concept of flow at work, which focuses on optimal experiences while working, was also found to impact innovative work behavior positively. This theory posits that when individuals are fully engaged in their work, face challenges that match their skills, and feel freedom and control over their activities, they can achieve high levels of concentration, increasing creativity and innovation. Research findings support this theory by showing that flow at work positively contributes to intrinsic motivation and creativity, which ultimately strengthens innovative work behavior in MSMEs in Malang. Overall, the results of this research provide strong empirical support for the relevance of emotional intelligence theory and flow at work in the context of MSMEs, providing a solid foundation for developing strategies and interventions that can increase innovative capacity in the sector.

Flow is when people are so absorbed in an activity that nothing else seems important. The experience is so enjoyable that people will go to any lengths to get it (Csikszentmihalyi, 1990). Flow can also be defined as the experience of being fully engaged with the task at hand, unencumbered by external worries or concerns (Fullagar & Fave, 2017). The flow experience is often associated with job satisfaction and a positive mood at work. Personal resources (such as self-confidence and creativity) and job resources (such as social support) are reported to increase the flow at work, thereby building personal and job resources. Therefore, this increases the likelihood of a flow spiral effect

occurring. A theory by Fredrickson (2000) proposes that momentary positive emotional experiences (such as flow) can expand one's repertoire of thoughts and actions, build personal resources, and create a spiral of well-being.

Individuals who experience flow while working will present positive emotions and enjoy their work experience. Flow, which provides intrinsic feedback, causes individuals to tend to be more curious, cognitively flexible, willing to take risks, and persistent in facing obstacles—characteristics that should facilitate the development of new and potentially valuable things (Csikszentmihalyi, 2014). Intrinsic motivation also causes people to view obstacles as exciting and challenging tasks that they can enjoy. This is a crucial predictor of innovative achievement (Ryan & Deci, 2000). Those with a high intensity of experiencing flow tend to work creatively, achieve their goals, and have a positive affection that supports creative decision-making (Fullagar & Fave, 2017).

In addition, individuals who experience high levels of flow intensity tend to show creativity in their work, achieve their goals, and show positive affection that supports creative decision-making. These findings are consistent with research by Fullagar and Fave (2017), which shows that intense flow experiences can stimulate creative work and create conditions supporting innovative decision-making. Thus, flow experiences not only increase individual job satisfaction but also positively impact creativity and innovative decision-making abilities in the work environment.

Overall, this research provides a valuable contribution to understanding the factors influencing innovative work behavior in MSMEs in Malang. By combining the theory of emotional intelligence and optimal experience at work, this research reveals the importance of psychological aspects in shaping the attitudes and actions of entrepreneurs in facing challenges and creating innovation. The results of this research can be a basis for developing supporting strategies, training, and policies aimed at increasing the innovative capacity of MSMEs, not only in Malang but also in all national economic contexts.

CONCLUSION

This research shows that emotional intelligence and flow at work significantly shape innovative work behavior among MSME entrepreneurs in Malang. Partially, both emotional intelligence and flow at work variables each have a significant role in innovative work behavior. Likewise, these two variables can explain 24.9% of innovative work behavior. This can answer the need for more research that examines the influence of flow at work on innovative work behavior in entrepreneurship, as in the creative world as in previous studies. This research also shows that emotionally intelligent entrepreneurs tend to be more innovative at work, like employees and leaders in the industrial world in previous studies. However, 75.1% of other factors that can explain innovative work behavior in entrepreneurs still need further research. Future research can also explore whether specific business fields influence their workflow and innovative work behavior.

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