

The Influence of Internal Motivation and Digital Literacy Towards Students' Proactivity

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ABSTRAK

Pemerintah Indonesia menjalankan Program Kampus Mengajar sebagai bagian dari Program Kampus Merdeka Belajar Merdeka (MBKM) – Program Kampus Mandiri – yang bertujuan untuk memberikan kesempatan kepada mahasiswa untuk belajar dan mengembangkan hard dan soft skill melalui kegiatan yang bermakna di luar kelas. Proaktivitas telah dianggap sebagai kompetensi penting untuk mendukung keberhasilan seseorang dan penelitian ini bertujuan untuk menentukan faktor-faktor yang mempengaruhinya. Tujuan dari penelitian ini adalah untuk menganalisis pengaruh motivasi internal dan literasi digital siswa terhadap proaktif mereka. Penelitian ini menggunakan metode kuantitatif dengan melibatkan 132 mahasiswa yang mengikuti Program Teaching Campus Tahap 1. Pengumpulan data dilakukan dengan menggunakan kuesioner online. Data dianalisis dengan regresi dan hasilnya menunjukkan bahwa motivasi internal dan literasi digital siswa berpengaruh positif dan signifikan terhadap keaktifan siswa. Hasil penelitian menemukan bahwa untuk meningkatkan proaktif siswa, motivasi internal dan literasi digital mereka perlu dikedepankan. Untuk merangsang motivasi internal siswa, mereka harus sering ditanya tentang tujuan dan sasaran belajar mereka di perguruan tinggi, atau target mereka setelah lulus, sedangkan untuk meningkatkan literasi digital mereka dengan menerapkan pembelajaran online (e-learning) di kelas. Sistem pembelajaran Massive Open Online Courses (MOOCs) juga dapat diterapkan untuk meningkatkan keterampilan literasi digital.

ABSTRACT

The Indonesian government runs Teaching Campus Program as part of the Merdeka Learning Campus Merdeka (MBKM) – Independent Campus Program – which aims to provide opportunities for students to learn and develop hard and soft skills through meaningful activities outside the classroom. Proactivity has been considered a crucial competency to support one's success and this study aims at determining the factors that affect it. The aims of this study is to analyses the effect of student's internal motivation and digital literacy on their proactivity. This study use a quantitative method, it involved 132 students who participated in Phase 1 of the Teaching Campus Program. The data were collected using an online questionnaire. The data were analyzed by regression and the results showed that students' internal motivation and digital literacy had a positive and significant influence on their proactivity. The result of study found that to enhance students' proactivity, their internal motivation and digital literacy need to be put forward. To stimulate students' internal motivation, they should be asked frequently about their learning goals and objectives in higher education, or their targets after graduation, while improving their digital literacy is by applying online learning (e-learning) in the classroom. The Massive Open Online Courses (MOOCs) learning system can also be implemented to improve digital literacy skills.

1. INTRODUCTION

Globalization in the 21st century creates rapid changes in all fields and modern technological developments demand different types and forms of experience from year to year, which cannot be predicted

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in the next two decades (Chalkiadaki, 2018; Malik, 2018). Those conditions certainly impact the education sector that will be a serious problem if a higher institution does not observe them comprehensively. They need to pay attention to every influence and growth that appears in this current era. Twenty-First Century globalization refers to “trade and transactions, movement of capital and investment, migration and movement of people and transfer of knowledge” (Bandur et al., 2022; Fisher, 2000; Garba et al., 2015) where it demands superior and competent human resources. Consequently, students are required to prepare themselves as well-rounded individuals for their future jobs, careers, and lives. The younger generation will face a more competitive environment because of globalization. They are demanded to develop hard skills and soft skills to achieve a successful career and social interaction in society (Fitrihana et al., 2014; Majid et al., 2012; Mukeredzi et al., 2015). Hard skills or technical skills are specific competencies to perform or complete certain tasks while soft skills involve personality, attributes, qualities, and personal behavior (Laker & Powell, 2011; Majid et al., 2012).

Dealing with those challenges, the Indonesian government runs Teaching Campus Program as part of the Merdeka Learning Campus Merdeka (MBKM) – Independent Campus Program – which aims to provide opportunities for students to learn and develop hard and soft skills through meaningful activities outside the classroom. In this program, students are free to register on the website of the Ministry of Education and Culture to be placed in elementary schools throughout Indonesia and assist the teaching and learning process at these schools. The students who pass the Teaching Campus Program will collaborate, act, and serve the country for 12 weeks in the selected areas that are greatly affected by the COVID-19 outbreak (Karuniasih, 2022; Sahin & Shelley, 2020). This program also gives students chances to actualize their passion, enthusiasm, and desire to make a positive contribution to the world of education.

The Teaching Campus Program demands a high level of students’ soft skills, one of which is proactivity that refers to an individual’s tendency to take an active role in promoting other people and/or the environment. The proactive characteristics and behaviors reflect complementary tendencies and actions taken by individuals to shape themselves within their environment (Grant & Ashford, 2008; Sidelinger & Frisby, 2019; Zhu et al., 2017). Proactive individual tends to have higher academic achievement, networking, job search success, engagement on their career, and career success (Bakker et al., 2012; Pan et al., 2018; Shi et al., 2011; Turban et al., 2017).

Proactivity is benefitting individual for achieving more success in life. It is crucial to identify factors affecting one’s proactivity. Several theories stated that personality, environment, and purposive training might improve proactiveness of an individual (Grant & Ashford, 2008; Parker & Collins, 2010; Wu et al., 2018). Previous study reveals that student’s goal orientation in Australia positively improve their proactivity (Tolentino et al., 2014). Furthermore, information acquisition positively influences a businessman’s performance to achieve more benefits. However, previous study show a fast screening on the google scholar from 2015 to 2022 using keyword “Indonesian student’s proactivity” showed that there are limited study identifying factors influencing student’s proactivity especially in the university contexts in Indonesia (Garay et al., 2017). Therefore, it is crucial to identify factors affecting student’s tendencies to take initiative for personal or environmental improvement.

Based on the previous paragraph about the urgency of university student’s proactivity, the aims of this study is to analyses the effect of student’s internal motivation and digital literacy on their proactivity. First, it will analyze each partial effect of internal motivation and digital literacy on proactivity. Second, it will analyses the effect of both student’s internal motivation and digital literacy on proactivity.

2. METHOD

This study employed a quantitative correlational study to determine the relationship of the student’s internal motivation and digital literacy towards their proactivity. A regression linear analysis was performed to identify and examine the effect of internal motivation and digital literacy on student’s proactivity. Analysis performed using SPSS to determine the partial and double regression effect of the two variables on student’s proactivity. Variables Interaction is show in Figure 1.

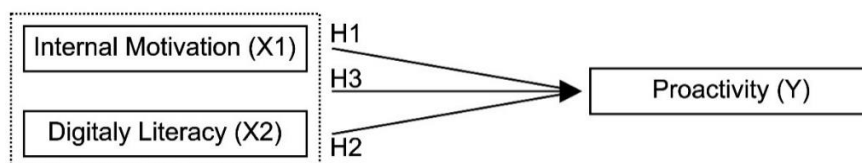


Figure 1. Variables Interaction

The data collection used a questionnaire to measure the internal motivation (Ginja & Chen, 2020; Nurrokhmanti et al., 2016). It consisted of three sub-variables, namely interest, perceived competence, and urgency. Meanwhile, the digital literacy instruments were to measure the extent of students' ability in accessing, producing, and processing digital-based information (Ferrari & Punie, 2013; Law et al., 2018). The digital literacy instrument involved three sub-variables, namely information, media, and technological literacy. The proactivity instrument measured the student activity, and this instrument was adopted from Proactive work behavior containing four sub-variables, taking charge, voice, individual innovation, and problem prevention. The sample in this study were the students of Universitas Negeri Yogyakarta who participated in Phase 1 of the Teaching Campus Program with 317 students were involved in this program. The instruments were given online to students through the teaching groups, the lecturers, and the field supervisor. The data collection was carried out for 2 weeks and 132 respondents filled in the questionnaire in a google form. The obtained data were then analyzed descriptively to determine the level of students' internal motivation, digital literacy, and proactivity. It was followed with multiple linear regression analysis to determine the relationship among the variables.

3. RESULT AND DISCUSSION

Result

Instrument validity and reliability

The results of the validity and reliability is show in Table 1 for the instruments to measure the students' internal motivation, digital literacy, and proactivity in the study showed that all instruments were valid and reliable (Junika et al., 2020; Sürücü & Maslakci, 2020).

Table 1. Validity and Reliability Instrument

Variable (N)	Validity	Reliability
Internal Motivation	0.637** ~ 772**	0.858
Digital Literacy	0.791** ~ 0.898**	0.823
Proactivity	0.479** ~ 0.732**	0.929

Note. ** = Significant (p = 0.01)

The Partial influence of internal motivation and digital literacy on student proactivity

The results of data analysis showed that internal motivation had a positive and significant influence on students' proactivity as shown in Table 2.

Table 2. The Linear Regression Results for the Relationship between Internal Motivation and Digital Literacy on Proactivity

Variable	r	R Square	Adjusted R Square	F	Sig.
Internal Motivation towards Proactivity	0.560	0.313	0.308	59.339	0.000
Digital Literacy Towards Proactivity	0.706	0.498	0.494	128.862	0.000

Base on Table 2, the analysis results indicated that there was a positive and significant relationship between internal motivation and students' proactivity (r = 0.560; p = 0.00). In addition, the results showed that digital literacy had a positive and significant relationship with students' proactivity (r = 0.706; p = 0.00). The relationship between the student's internal motivation and digital literacy towards the students' proactivity indicates that each variable is possible to influence one another or have interrelationships. The changes in one variable are possible to give positive and significant effects to the other two variables. Further analysis showed that internal motivation and digital literacy partially have a significant effect on proactivity. Based on the ANOVA test, it was obtained that the internal motivation had a significant effect on student proactivity (F = 59.339 and p = .000 < .050) and digital literacy also had a significant effect on student proactivity (F = 128,862 and p = .000 < .050), respectively. This indicates that internal motivation and digital literacy can be used to predict the level of students' proactivity. The Partial Influence Coefficient is show in Table 3.

Table 3. The Partial Influence Coefficient of Internal Motivation and Digital Literacy Towards Proactivity

Model	Unstandardized Coefficients		t	Sig
	B	Std. Error		
Internal Motivation towards Proactivity	1.409	0.332	4.246	0.000
	0.615	0.080		
Digital Literacy towards Proactivity	1.140	0.250	11.352	0.000
	0.724	0.064		

Base on Table 3, linear regression test showed that internal motivation partially affects students' proactivity. The consistency value of proactivity if influenced by internal motivation was 1.409, while the consistency value of proactivity if influenced by digital literacy was 1.140, respectively. The value changes of 1% in the internal motivation can affect the level of students' proactivity by 0.615 and the 1% change in the digital literacy value will affect the proactivity level of students by 0.724, respectively. Thus, the analysis result concludes that internal motivation has a positive and significant effect ($t = 4.246$ and $p = .000 < .050$) partially on student proactivity. Likewise, the digital literacy has a positive and significant effect ($t = 11.352$ and $p = .000 < .050$) on student proactivity.

The influence of Internal Motivation and Digital Literacy on Student Proactivity

The results of data analysis show that students' internal motivation influences their proactivity as show in Table 4.

Table 4. Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Sig
	B	Std. Error	
(Constant)	0.287	0.291	0.326
Internal Motivaion	0.338	0.070	0.000
Digital Literacy	0.584	0.066	0.000

From Table 4, based on the analysis results, it is revealed that internal motivation and digital literacy have a positive and significant effect on students' proactivity. The aforementioned equation implies that if the internal motivation variable (X1) and digital literacy (X2) have a constant value, then the student proactivity variable (Y) will have a value of 0.287. If student's internal motivation improves 1%, it will enhance their proactivity by 0.338. Furthermore, an escalation of 1% in the digital literacy variable will cause the student proactivity variable to increase by 0.584.

F Test

The result of F-test is to analyse internal motivation and digital literacy mutually have a significant influence on students' proactivity. The result is show in Table 5

Table 5. F Test

No.	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.207	2	12.603	86.929	0.000
2	Residual	18.703	129	0.145		
Total		43.910	131			

Base on Table 5, the F count is 86,929 with a sig. of 0.000. It shows that the value of F count is bigger than F table and the value of sig. is below 0.05. Thus, H0 is rejected, and Ha is accepted. In other words, internal motivation and digital literacy mutually have a significant influence on students' proactivity.

Multiple Coefficient of Determination (R2)

Results of determination coefficient is to determine influenced by other variables beyond this regression equation or the variables that are not examined. The result as show in Table 6.

Table 6. Results of Determination Coefficient

Model	R	R Square	Adjusted R Square
1	0.758	0.574	0.567

Base on [Table 6](#), the coefficient of determination (R Square) is 0.574 or equal to 57.0%. It means that the internal motivation variable (X1) and digital literacy (X2) mutually influence the student proactivity variable (Y) by 57.0%. Meanwhile, the rest (100%-57.0% = 43%) is influenced by other variables beyond this regression equation or the variables that are not examined.

Discussion

The proactive personality means a person who has power that is not limited by a certain situation and can continuously take actions that can influence, improve, and change to a better condition or organizational environment. An individual with a high level of proactivity can achieve success in various fields. However, it is apprehensive to find a study that explores the factors influencing one's proactivity, especially in the university contexts in Indonesia. So, it is important to clarify the affecting factors of the proactivity level. The two factors that affect the level of proactivity are internal motivation and digital literacy. Motivation underlies the actions taken by a person ([Chapman & Rich, 2018](#); [Garon-Carrier et al., 2016](#); [Khan et al., 2019](#)). It comes from the internal part of the individual (motivational factor) and will encourage someone to take an initiative for making an action. The motivational factors are (1) success, (2) recognition, (3) work, (4) responsibility, and (5) development. Individuals who have internal motivation will find it easier to act without being influenced by the outside parties ([Compton et al., 2020](#); [Partovi & Razavi, 2019](#); [Suhardi, 2013](#)).

The results showed that internal motivation and digital literacy had a positive and significant influence on one's proactivity. This result is in line with the study conducted by previous research which proves that there is a positive relationship between proactivity personality and internal motivation ([Firdausi, 2018](#)). It reveals that individuals who have the power to influence, improve, and change the better organizational environment can generate motivation that comes from the within individual. This study also agrees with the research from other previous research which found that employees are more motivated when employees exhibit a proactive personality and higher perceived work complexity ([Joo & Lim, 2009](#)). Their perceptions of job complexity partially mediated the relationship between organizational learning culture and commitment as well as the relationship between proactive personality and internal motivation.

This study shows that the higher internal motivation, the higher the proactivity level will be shown. It also explains that the higher the internal motivation in a student, the more direct action or initiative will be presented in carrying out the Campus Teaching program. To stimulate students' internal motivation, they should be asked frequently about their learning goals and objectives in higher education or their targets after graduation ([Green et al., 2020](#); [Guan et al., 2017](#)). The questions about their goals, or their needs in achieving their goals, and so on need to be clarified to automatically arise the students' motivation. In short, motivation refers to an internal factor for a person or individual that involves their preference without any encouragement from outside parties ([Partovi & Razavi, 2019](#); [Shin, 2018](#)). This is supported by previous research which states that internal motivation arises from within the individual with the basis of his own volition, without any coercion from others ([Razi, 2013](#)).

The analysis results show that digital literacy has a positive and significant relationship with students' proactivity ($r = 0.706$; $p = 0.00$). In addition to increasing proactivity, digital literacy is also crucial to enhance students' readiness to face the recent challenges from the world of work. This is in accordance with research from previous researchers which states that the better the level of students' digital literacy, the higher the readiness for entrepreneurship in this digital era ([Almi & Rahmi, 2020](#); [Fauzi et al., 2020](#); [Neumeyer et al., 2020](#)). The research highlights that the higher the digital literacy level of a student, the more life skills they will have. Their finding is in line with the findings from previous study which has proven a significant relationship between digital literacy and self-directed learning in the students' undergraduate thesis ([Akbar & Anggaraeni, 2017](#)). It points out that the higher students' digital literacy, the better self-directed learning they will perform. This explains that a person's SDL can be viewed from their digital literacy competencies. The results are also reinforced by the claim from previous researches that state with digital technology, individuals will be able to direct themselves to learn, reveal, and solve various problems ([Mohapatra et al., 2022](#)).

To improve digital literacy, it is necessary to know its elements. Previous studies suggests eight essential aspects for developing digital literacy, namely culture, i.e. to understand the various contexts of users in the digital world; cognitive aspect, or thinking ability in assessing contents; constructive aspect as the creation of expertise and actual things; communicative aspect to understand the networks and interaction in the digital world; responsible self-confidence; creativity for making innovation; critical thinking; and social responsibility ([Belshaw, 2012](#); [Blevins, 2018](#)). These eight aspects can be achieved through e-learning. Previous research state that online learning can improve the digital literacy skills among the fourth-semester students in the Elementary School Teacher Education Study Program of PGRI Madiun University ([Anggrasari, 2020](#)).

Students can also utilize the Massive Open Online Courses (MOOCs) learning system to improve their digital literacy skills. The MOOCs are the appropriate platform to improve digital literacy because during the learning process MOOCs will automatically help them to develop their digital literacy skills (Soyemi et al., 2018; Stewart, 2013; Thanachawengsakul, 2020). It has been proven in the study of previous research that show online learning participation has indirectly developed students' digital literacy (Littlejohn et al., 2012). If MOOCs are integrated with academic programs and curricula, it will be beneficial to improve students' academic performance (Al-Rahmi et al., 2019; Alyoussef, 2021; Lambert & Alony, 2018).

This study implicates that university student's proactivity in Indonesia might be increased by improving their internal motivation and digital literacy. The result of this study adds empirical evidence related to factors affecting student's proactivity in the university setting. The finding of this study also inline with proactivity theories which stated that internal personality and environment have a significant effect on individual's proactive behavior (Grant & Ashford, 2008; Parker & Collins, 2010). Hence, this study brings additional both theoretical and empirical evidence on one's creativity development. Teachers in univesity can facilitate students' internal motivation improvement by encouraging students to explore their interest, measure their capability, and identify what are crucial for their self-development. In addition, students' ability to access, produce, dan process various digital information in this global real-time era also will positively affects their proactivity. This study has a limitation in describing the other variables that might have a significant effect on student's proactivity development. Therefore, a further research is suggested to identiy factors influencing proactive personality of a student.

4. CONCLUSION

The student's internal motivation and digital literacy have a positive and significant influence on their proactivity, either partially or mutually. Student's interest, perceive competency, and their understanding on the overall situation will improve their motivation which subsequently enhancing their initiative to do something positively. Furthermore, students' ability to acces, produce, and process a digital based information will positively affects their capability to take charge a problem, do innovative action, and prevent the problem reoccured. Both, internal motivation and digital literacy mutually have a significant influence on students' proactivity. Therefore, if the teacher wants to improve students' proactivity, their internal motivation and digital literacy also need to be developed.

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