Improving Teacher Creativity in Teaching through Career Development

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Global creativity indices in developing countries tend to be low. In the field of education, creativity has an important role. Efforts to increase the creativity of educational human resources continue to be hyped. Creative teachers produce creative students. But, the fact is that teachers in developing countries tend to need more creativity in teaching. This study aims to analyze the influence of organizational climate in the school environment and teacher career development on teacher creativity in teaching. The sample of this study was 145 junior high school private teachers in Semarang Regency, Central Java Province, Indonesia. Statistical analysis using PLS-SEM and PLSpredict. The results showed that the school's organizational climate positively affected teacher creativity in teaching. Teacher career development also positively affects teacher creativity in teaching. In addition, teacher career development mediates the influence of school organizational climate and teacher creativity in teaching. The findings could help schools or private educational institutions to understand how organizational climate affects teachers' creativity in teaching. So that it can be used as a guideline for schools or other educational institutions to increase teacher creativity in teaching.

Keywords: teacher creativity, organizational climate, teacher career development, creativity, creative learning

INTRODUCTION

21st-century skills are often discussed in the field of education because they can help direct students in the face of an ever-evolving world (Taar & Palojoki, 2022; Teo, 2019). The transformation of education occurs in the 21st century. According (Farizi et al., 2023; Umamah et al., 2021) The transformation is in the form of changes in the role of educators, learning processes, and learning objectives. Learning objectives and procedures focus on the competence of learners. One of the skills of the 21st century is creativity. Creativity is understood as a result or product obtained through a dynamic process involving different and critical ideas or ideas (Griffith, 2021; van der Schyff et al., 2018). Supporting the concept, from the point of view of psychology argues that creativity results from cognitive processes focused on product development and the generation of new ideas (Leschziner &; Brett, 2019).

People's creativity in developing countries tends to be low. Including Indonesia, Indonesia has a global creativity index of 0.202 and is ranked 115 out of 139 countries (ChartsBin, 2023). Low creativity hinders the innovation climate (Isaksen, 2023). In the field of education, creativity has an

important role (Glăveanu, 2018; Hernández-Torrano, 2020). Efforts to increase creativity in educational human resources continue to be hyped. It takes a lot of effort to increase the creativity of teachers and students (John Lemay et al., 2021). Creative students are certainly produced from the education of creative teachers. Teachers become the core component that plays a role in synergizing school components in achieving education goals (Kadir & Umiarso, 2023; Kotze et al., 2019). But the fact is that teachers tend to be less creative in teaching. So, teachers in teaching tend to be boring and need more innovation. Teachers in teaching should use a student-centered learning approach, no longer a teacher center. Several factors affect creativity, one of which is the organizational climate (West & Sacramento, 2023).

According to (Fainshmidt & Frazier, 2017; Kirilo et al., 2018) Organizational climate includes social attributes perceived by members of the organization that impact motivation and interaction in the organizational environment. A positive organizational climate plays a vital role in influencing teacher creativity (Don et al., 2021; Liu, 2019; Sokol et al., 2015). When an educational institution creates a climate that supports and encourages collaboration, exploration of ideas, and acceptance of new ideas, teachers tend to feel more motivated to develop creative and innovative learning approaches.

However, some private schools in developing countries tend to ignore the climatic conditions of schools (Putra et al., 2020), Indonesia is one of the developing countries. Most private schools in Indonesia do not pay attention to school climate conditions in supporting teacher creativity, such as the absence of a clear career path and lack of supporting facilities and infrastructure (Pratami et al., 2018). Besides, according to Iqbal, (2012) Public schools have a better learning environment than private schools. This condition will reduce teacher motivation to create creative ways of teaching.

Teachers are motivated in teaching and develop their professionalism if the school organization has a strong appeal. These attractions include the availability of a systematic career path. The teachers in Indonesia who have the status of civil servants already have a clear career path and have been regulated by the government. However, for teachers with non-civil servant status in private schools, only a few schools regulate the career path of teachers. This depends on the school or foundation that houses the school, despite systematic efforts in teacher career development. However, these efforts still face various influencing factors, such as personal, socio-cultural, and even political and economic factors. Why teacher career development is significant? Because the most crucial ability in career development is the ability to innovation and creativity (Huang et al., 2020).

This research is essential because it develops the organizational climate of schools and the development of teacher career development. In addition, this study analyzes the influence of the two concepts as an effort to increase teacher creativity in private junior high schools. Therefore, this research aims to analyze the influence of organizational climate in the school environment and teacher career development on teacher creativity in teaching. We describe the results of this empirical study considering the proposed relationship between organizational climate teacher career development and teacher creativity in teaching. Finally, we present a synthesis of some theoretical and practical implications and final considerations for the study.

Literature Review

Organizational climate became the subject of research starting in the 1930s, and in the 1970s, quantitative research on organizational climate was studied on organizational behaviour and organizational psychology (Chaubey & Sahoo, 2018; Schneider et al., 2012). Based on literature studies that there is a substantial correlation between organizational climate and creativity (Chaubey & Sahoo, 2018; Jafri et al., 2016; Parke &; Seo, 2017). While according to Chaubey et al., (2022) the interaction between creativity, organizational climate, and joint training creates a positive moderation effect. In addition, according to Chaubey &; Sahoo, (2018) from the results of his research, employees' creative instinct becomes more profound when the organization provides a physical work

climate and a conducive environment to stimulate the creative thinking process of employees by encouraging employees to exchange ideas between employees. Other opinions, according to Mutonyi et al., (2020) From the results of his research, organizational climate has an essential role in employee creative performance. In addition, in his research, it was also revealed that individual creativity mediates the relationship between organizational climate and individual innovative behaviour. While according to Thiagarajan &; Kumar, (2018) The innovative climate in an organization can maintain and increase the level of innovation.

H1 : The organizational climate of the school has a positive effect on teacher creativity.

The development of research on teacher careers is growing globally (Chaaban et al., 2023; Coldwell, 2016; Sayang-Hammond, 2017; Rinke & Mawhinney, 2017). However, more research still needs to examine teachers' career development in Indonesia as one of the developing countries. There needs to be more research on the career development of private teachers. On the other hand, many studies examine the motivating factors for teachers to leave their careers (Qin, 2021). According to Mohammadifar & Tabatabaee-Yazdi, (2021) From the research results, there is a positive relationship between continuous teacher professional development and teacher creativity. Another finding is that teacher creativity is not influenced by gender and duration of teacher teaching, so creativity between individual men and women is the same and is not influenced by how long the teacher's experience in teaching. According to Conradty, (2020) other research results show that teacher professional development has a significant effect on the way teachers work, especially on the influence of creativity and learning motivation. Another opinion was expressed Wadaani, (2023) that professional development is a significant factor that contributes positively to variations in teacher attitudes in teaching. The findings highlight the importance of teacher education and professional development. While according to W. Han &; Abdrahim, (2023) teacher creativity plays an essential role in developing student competence and teacher professional development. Teacher creativity results from an interaction between personal characteristics and the surrounding social environment. A similar opinion was expressed Melgarejo-Torralba et al., (2022) from the results of his research, the development of creative skills obtained through new approaches can significantly impact students' career development in the future.

H2 : The school's organisational climate has a positive effect on the career development of teachers

H3 : Teacher career development has a positive and significant effect on teacher creativity

Based on literature studies, professional career development is needed to maximize technical work (Marie De Gulan &; Aguiling, 2021). According to (Koekemoer & Crafford, 2019; Marie De Gulan & Aguiling, 2021) the stages of career development vary, considering age and gender. Women enjoy more quality experiences in both work and family life than men. In addition, a positive and inclusive organizational climate in educational institutions can provide a solid foundation for teacher career development by providing support and opportunities for professional growth (Peterson, 2002 Effective career development can, in turn, improve teachers' motivation and well-being, creating an environment where their creativity can flourish (Cece et al., 2022) By feeling valued and supported, teachers tend to be bolder in experimenting and creating innovative learning approaches, enabling a dynamic learning atmosphere and positively impacting student development. Career development with employee orientation is a practice to increase work creativity based on individual goals and desires (Collin et al., 2020), This career development can affect employees and other competencies. Another finding is that human resource development increases employee creativity and can support creativity by taking responsibility with the team, clarity of career paths, and fair leadership.

H4: Teacher career development mediates the relationship between school organizational climate and teacher creativity

METHOD

This study examines how the influence of school organizational climate can increase teacher creativity. It also analyzes the indirect influence of school organizational climate and teacher creativity in teaching through the mediating role of teacher career development. The study's respondents were private school teachers at the junior high education level, a case study in Semarang district, Central Java Province, Indonesia. The distribution of questionnaires through Google Forms to 270 private teachers at the junior high school level in Semarang Regency and those who participated in filling out the questionnaire amounted to 145 respondents. According to (Edeh et al., 2023; Sarstedt et al., 2022) The minimum number of research samples is ten times the number of indicators, and the number of indicators in this study is 14, so the minimum number of samples needed is 140 respondents.

Each questionnaire of all variables was measured on a Likert scale with five answer choices: strongly disagree-1, disagree-2, No opinion-3, Agree - 4 and very agree - 5. The organizational climate questionnaire (OC) consists of 6 indicators adopted from Bohórquez et al., (2023) that is OC1 "Interpersonal relationships"; OC2 "Motivation"; OC3 "Leadership"; OC4 " Suitability for Work"; OC5 "Commitment"; OC6 "Innovation". The teacher career development variable questionnaire (TCD) consists of four indicators, namely TCD1 "Career opportunities"; TCD2 "Organizational career support" TCD3 "Job challenges; TCD4 "Social Career Support". Variable Teacher Creativity (TC) consists of 4 items, namely TC1 "Developing and implementing new ideas"; TC2 "Open and responsive"; TC3 "Demonstrate originality and inventiveness"; TC4 "Seeing failure as an opportunity to learn". Items taken from Raymundo, (2020).

This data analysis adopts (Al-Kurdi et al., 2020; Hair Jr et al., 2023) which assesses measurement models and structural models by utilizing algorithms in SmartPLS 4.0.

FINDINGS

The respondents of this study were non-civil servant teachers at private junior high schools in Semarang Regency, Central Java Province, Indonesia, totalling 145 respondents. Based on Table 1, the majority of respondents are women (66.9%) and also dominated by respondents who are certified in the teaching profession (78.6%). The majority have undergraduate education (72.4%), are in the age range of 51-60 years (37.9%) and have more than ten years of teaching experience (77.2%).

Table 1
Characteristics of respondents

Characteristics	Clasification	Amount	Percentage
Age	20-30 years old	13 people	9,1%
	31-40 years old	42 people	28,9%
	41-50 years old	35 people	24,1%
	51-60 years old	55 people	37,9%
Gender	man	48 people	33,10%
	woman	97 people	66,90%
Last Education	Bachelor	105 people	72,4%
	Magister	40 people	27,6%
Teaching Experience	< 5 years	17 people	11,7%
	5-10 years	16 people	11,1%
	>10 years	112 people	77,2%
Teacher Certification	Certified	114 people	78,6 %
	Not Certified	31 people	21,4%

Source : author's estimation

Measurement Model

Convergent validity testing through the correlation between items using Cronbach's alpha, composite reliability (CR) and AVE, and loading factors as in Table 2. CR, AVE and loading-factor values greater than 0.70 indicate a high correlation between the indicator and its latent variables, verifying convergent validity. This study tested the validity of the discriminant correlation between the variables adopted. (Hair Jr et al., 2023; Ringle et al., 2017; Sarstedt et al., 2022) with cross-loadings, Fornell-Larcker, Heterotrait monotrait (HTMT) ratio.

Table 2
Outer loading, composite reliability dan average variance extracted

Variable	Loading	Note	Alpha	CR	AVE
Organizational Climate (OC)			0.852	0.857	0.574
OC1	0.755	valid			
OC2	0.742	Valid			
OC3	0.737	Valid			
OC4	0.719	Valid			
OC5	0.784	Valid			
OC6	0.806	Valid			
Teacher Career Development (TCD)			0.802	0.812	0.627
TCD1	0.807	Valid			
TCD2	0.844	Valid			
TCD3	0.760	Valid			
TCD4	0.754	Valid			
Teacher Creativity (TC)			0.811	0.821	0.636
TC1	0.812	Valid			
TC2	0.833	Valid			
TC3	0.792	Valid			
TC4	0.752	Valid			

Source: author's estimation

The test results show a significant relationship with the variables, which is stronger than the relationship with other constructs (Table 3). The findings show that between variables have a low correlation. The HTMT ratio results showed all lower than 0.90. It verifies the validity of the discriminant.

Tabel 3
Fornell-Larcker dan HTMT

	Fornell-Larcker				HTMT		
	OC	TCD	TC		OC	TCD	TC
OC	0.758			OC			
TCD	0.721	0.792		TCD	0.852		
TC	0.595	0.642	0.798	TC	0.710	0.778	

Source: author's estimation

In addition, in Table 4, cross-loading (bolded) indicates that the value is higher than the cross-loading value of other variables. This means that the association of the variable itself is more robust compared to other constructs. The findings also verified the validity of discriminants, showing the low correlation between variables.

Table 4
Cross-loading of factors

Item	Organizational Climate	Teacher Career Development	Teacher Creativity
OC1	**0.755**	0.590	0.504
OC2	**0.742**	0.481	0.432
OC3	**0.737**	0.465	0.441
OC4	**0.719**	0.435	0.440
OC5	**0.784**	0.597	0.424
OC6	**0.806**	0.667	0.461
TC1	0.491	0.587	**0.812**
TC2	0.513	0.576	**0.833**
TC3	0.481	0.445	**0.792**
TC4	0.402	0.411	**0.752**
TCD1	0.641	**0.807**	0.520
TCD2	0.614	**0.844**	0.595
TCD3	0.569	**0.760**	0.406
TCD4	0.439	**0.754**	0.500

Source: author's estimation

Structural Model

Before testing the structural model, it is necessary to test multicollinearity between variables and Inner VIF because the value is <5 (table 5),. Then there is no multicollinearity between variables affecting teacher creativity and career development.

Table 5
Inner VIF

	Teacher Career Development	Teacher Creativity
Organizational Climate	1.000	2.080
Teacher Career Development		2.080

Source: author's estimation

Table 6
Structural Model Testing

Relationship	Path Coefficient	T statistics	95% CI BCa	P values	f²	criteria
OC -> TC	0.275	2.512	(0.054;0.482)	0.012	0.066	moderat
OC -> TCD	0.721	17.607	(0.626;0.790)	0.000	1.080	High
TCD -> TC	0.444	4.334	(0.244;0.644)	0.000	0.172	Moderat
OC->TCD->TC	0.320	4.094	(0.168;0.477)	0.000	0.035	moderat

Source: author's estimation (criteria according to (Hair et al., 2019)

The results of the direct and indirect paths are presented in Table 6. School organizational climate (OC) has a significant direct influence on teacher creativity (TC). The effect is 0.275 with T-statistic (2.512>1.96) or p-value (0.012<0.05), so any change in the school's organizational climate will significantly increase teacher creativity. Thus, H1 is accepted. These findings reinforce the results of the study (Greenier et al., 2023; Wang et al., 2023) the school climate has a direct effect on fostering teacher teaching creativity..

Similarly, the school's organizational climate positively affects the career development of teachers. The effect is 0.721 with a T-statistic (17.607>1.96) or p-value (0.000<0.05) so that any positive change in the organizational climate of the school will significantly improve the career development of teachers so that H2 is accepted. The findings also reinforce the results of the study (Zhou et al., 2024) that the school climate had a significant effect on teacher professional development programs, as well as reinforcing the findings (Admiraal & Kittelsen Røberg, 2023) that a safe, supportive, collaborative and participatory school environment is a major factor influencing the professional development of teachers.

In addition, teacher career development has a positive influence on teacher creativity. The effect is 0.444 with a T-statistic (4.334>1.96) and a p-value of 0.000<0.05; thus, any positive changes in teacher career development will increase teacher creativity, so H3 is accepted. These findings reinforce the study by Han & Abdrahim, (2023) that teachers' professional career development has a positive and significant effect on teaching creativity. Han also argues that teachers' creativity in teaching results from personal characteristic interactions and the support of the surrounding social environment.

As for indirect effects, it show that teacher career development mediates the school organizational climate on the creativity of junior high school private teachers in Semarang District, Central Java Province. The mediating effect is 0.320 with a T-statistic (4.094>1.96) and p-value (0.000<0.05). Based on Table 7, Most indicators (3 out of 16 measurements), have lower RMSE and MAE values than linear regression (LM) models; this shows that PLS SEM models have medium predictive power.

Table 7
RMSE and MAE Comparison (PLS vs LM Model)

Item	Q²predict	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE
TCD1	0.395	0.551	**0.428**	0.555	0.425
TCD2	0.360	0.535	0.407	0.563	0.426
TCD3	0.309	0.546	**0.409**	0.554	0.403
TCD4	0.155	0.611	0.431	0.618	0.437
TC1	0.224	0.643	0.499	0.651	0.505
TC2	0.246	0.726	**0.533**	0.738	0.532
TC3	0.212	0.822	0.667	0.850	0.685
TC4	0.139	0.845	0.659	0.882	0.688

Source : author's estimation (criteria according to (Hair et al., 2019)

DISCUSSION AND CONCLUSION

The study results show that teacher career development has a positive effect of 44.4% on teacher creativity. In addition, teacher career development also mediates the organizational climate for teacher creativity by 32%. A clear career path can be interpreted as an attraction for teachers to always be creative in learning in the classroom. It can be realized if, in teacher career development, there is an element of assessment about teacher creativity in teaching in the classroom. Teacher career development is significant because this factor influences an individual's decision to keep teaching as his profession (Chaaban et al., 2023; Christensen et al., 2019; Van den Borre et al., 2021), And decide to remain in the teaching profession until retirement (Chaaban et al., 2023; Dupriez et al., 2016; Sutcher et al., 2019). Therefore, a program is needed to attract students for the teaching profession and advance the teacher's career (Amitai & Van Houtte, 2022), Especially in private educational institutions or private schools. In this case, private teachers need to negotiate in building and developing their careers to become an attraction for the teaching profession even though the private educational institution exists (Rinke &; Mawhinney, 2017). This relates to how the condition of the strength of intention to have a career in the teaching profession, according to (Li & Huang, 2017) A person's career intention is an individual's desire to reach a higher position in the organization. Career intentions are driven by individual personal values, work environment, perceived career success and psychological needs (Kessler et al., 2019).

Teacher career development focusing on empowering teacher creativity can be the key to creating dynamic and inspiring learning. Teacher career development programs by empowering creativity can be done through innovative learning training. (Mystakidis et al., 2021), Cross-lesson collaboration training to share the best ideas (Nye-Lengerman et al., 2019), Training on the use of information technology in creative learning and commitment to continuous teacher professional development (Steinert et al., 2019). These programs can assist teachers in creating learning that stimulates imagination and helps students develop into creative and critical individuals in thinking.

Teacher career development programs should provide clear career opportunities for teachers. Career clarity depends on the organization's career management, which includes organizational decree policies and practices (career management policies, career development support and provision of career information) to improve career effectiveness for its employees or employees (Coldwell, 2016; Orpen, 1994). Teacher career opportunities as a consequence of the challenges of teacher work in the future. Teachers must be able to adapt to changes in educational paradigms (Bratianu et al., 2020) and adapt to technological developments and the diversity of student learning styles (Kasneci et al., 2023). In addition, teachers must also be able to deliver lesson material with a more interactive, collaborative and technology-based approach. According to Marie De Gulan & Aguiling, (2021) That strategic career development is an effort to align human resources with organizational goals that can ultimately benefit both.

Based on the results of other studies show that to increase teacher creativity in teaching, the school's organizational climate must be conducive. This is in line with research (Chang et al., 2011) that organizational leadership factors and peer support in schools as part of the school climate greatly influence teacher innovation and creativity in teaching. According to Newman et al., (2020) , the work climate of school organizations that support innovation and provide teacher opportunities for initiatives will impact the psychology of teachers who feel safe and comfortable in implementing it. The results also support other previous research on organizational climate and creative innovation performance (Shanker et al., 2017), In addition, research (Yusr, 2016) which states the correlation of organizational climate and innovative creative ability. The main factor affecting the organizational climate is the interpersonal relationships of school residents.

Inclusive and robust interpersonal relationships between individuals in the school organization are at the core of the organizational climate to support teacher creativity (Yi et al., 2013). When teachers are heard and work in a supportive school environment, they are open to sharing ideas, full of innovation and love experimenting with new learning methods. Fluent in communication, solutive leaders overcome creative barriers and collaborate with peers, can foster fresh ideas and encourage the growth of sustainable teacher professional development (Haiyan & Allan, 2021). This is a demand for the complexity of education in modern times.

No less important is how the organizational climate of schools can increase teacher motivation. High motivation can encourage teachers to carry out tasks with enthusiasm (Jungert et al., 2020). When teachers feel recognized for their contributions and have clear career opportunities and support when experiencing obstacles, teachers will be motivated to develop innovation in learning. An organizational climate that accommodates teachers' achievements and room for experimentation can help teachers deal with the fear of failure. Besides that, it can also stimulate teachers to explore their creative power in teaching.

Another factor is the principal's leadership, which significantly shapes the organizational climate that facilitates teacher creativity. (Díez et al., 2020). The principal's visionary leadership that supports innovation can serve as a clear guide and give teachers confidence in experimenting with new approaches to learning. According to Squires, (2019) That visionary leadership can also create an environment that welcomes creative ideas well. With the recognition, support and resources school principals need, they can inspire and encourage teachers to innovate. In addition, teachers can also overcome obstacles and stimulate teacher creativity, which will ultimately enrich students' learning experience and improve overall school achievement.

On the other hand, commitment is also essential in shaping the school's organizational climate. A strong shared commitment to the goals and values of education is a fundamental foundation in shaping the organizational climate of schools that can support teacher creativity (Fuad et al., 2020). Teachers with high commitment will be encouraged to develop innovative ideas for the quality of learning. In addition, commitment also forms a spirit of teamwork among colleagues and leaders so that effective teamwork will be formed. According to Alblooshi et al., (2021) commitment encourages collaboration to generate ideas that have a positive impact on creating an inspiring and dynamic school environment.

Only some teachers tend to be creative in education dynamics that continue to develop. This phenomenon occurs due to the impact of monotonous routines, curriculum pressure and limited resources or time. The consequences of low teacher creativity in teaching are low interest in student learning, decreased level of active student participation and not optimal learning outcomes. Steps that can be taken to overcome this challenge are to create a school organizational climate that supports teacher creativity, such as improving interpersonal relationships, providing teacher motivation, exemplary principals and commitment to the teaching profession. In addition, providing teachers with opportunities for career development is also one of the effective solutions for increasing teacher creativity.

This study examines the effect of school organizational climate and teacher career development on teacher creativity. With the PLS-SEM methodology using SmartPLS 4, it was found that the school organizational climate positively influences teacher creativity in teaching. The organizational climate also positively affects the career development of teachers. Therefore, H1 and H2 are accepted. These results form the basis of how a principal or other stakeholder creates the right working conditions in the school in supporting the improvement of teacher creativity in teaching. The conducive organizational climate in the school environment can encourage teachers to develop their professionalism, which can impact teacher career development. The positive growth of interpersonal

relationships between teachers and other school residents, collaboration and mutual motivation, principal leadership, and increased commitment characterize the conducive conditions of the school environment.

The following finding is that there is a positive influence between teacher career development and teacher creativity in teaching, in addition to teacher career development mediating the influence of school organizational climate and teacher creativity in teaching. Therefore, H3 and H4 are accepted. The results of this research should be used as a guideline for education organizing foundations or other stakeholders in the field of education to design the career path of teachers who work in schools under their auspices. Clarity of career paths is a stimulus for teachers to be able to work optimally because their professional careers have been guaranteed. The career of a profession is accompanied by the welfare obtained. Teachers will focus and want to develop themselves to support their work because welfare is guaranteed. With a clear career path and proper welfare guarantees, teachers will remain in their profession.

Finally, some of the limitations of this study are worth commenting on. This study was conducted on private teachers at the junior high school level. Results may differ for other populations. Despite these limitations, the results of this study can have theoretical and practical implications.

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