The Influence of Participative Leadership, Organizational Climate, Organizational Commitment to Work Productivity of Vocational High School Teachers in Mataram City

Abdul Kadir Jaelani a, Anak Agung Gede Agung b, Made Yudana c, Kadek Rihendra Dantes d

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Abstract

The research objective was to determine the effect of Participative leadership, organizational climate, and organizational commitment on the work productivity of vocational school teachers in the city of Mataram. The research method is quantitative. The sampling technique of 721 teachers used random sampling based on the Morgan table corrected using the Warwick and Lininger formulas to obtain a sample of 186 respondents. Hypothesis testing uses Structural Equation Modeling analysis with Partial Least Squares (PLS-SEM).

The research results are; (1) Participative leadership has a direct positive and significant effect on organizational commitment and work productivity; (2) organizational climate has a direct positive and significant effect on work commitment and productivity; (3) Participative leadership has an indirect effect on work productivity through organizational commitment. (4) organizational climate has an indirect effect on work productivity through organizational commitment. Organizational commitment can act as a full mediation. It is suggested that in increasing teacher work productivity apply Participative leadership, organizational climate and involve organizational commitment as a mediating variable.

Keywords
participative leadership; organizational climate; organizational commitment; work productivity;

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a Student of Postgraduate at Ganesha University of Education, Singaraja, Bali, Indonesia
b Postgraduate at Ganesha University of Education, Singaraja, Bali, Indonesia
c Postgraduate at Ganesha University of Education, Singaraja, Bali, Indonesia
d Postgraduate at Ganesha University of Education, Singaraja, Bali, Indonesia
1 Introduction

Teachers have an important role in building the country and society, especially in developing countries like Indonesia. Teachers carry out their obligations depending on the readiness to sacrifice and work hard, so it is very necessary to have high competence to be able to work effectively and efficiently so that educational goals can be achieved optimally (Law No. 14, 2005). Teacher professionalism is built through the mastery of competencies that are needed in completing work. Important competencies for teacher positions are competence in the field of substance or field of study, competence in the field of learning, competence in the field of value education and guidance as well as competence in the field of relations and training/community service (Low of Ministry No. 16, 2007).

As a profession, teachers gain public trust to improve the quality of their productivity. The strength of a profession’s existence depends on public trust. The community believes that the necessary educational services in schools can only be obtained from teachers. Public trust is a key factor in strengthening professional identity and enabling members of the teaching profession to carry out their functions in professional ways (Wahyuni et al., 2019).

Efforts to increase productivity through increasing competence are closely related to the job training carried out and also the individual characteristics of each teacher. So it is expected that the higher the quality of job training carried out and the better the individual characteristics of teachers, the more competence and productivity of teachers will increase. Teacher work productivity is said to be good if it fulfills several indicators (Sutikno, 2009), as follows: (1) Designing learning, implementing learning, and evaluating learning; (2) Academic achievements, with indicators of academic works and monumental works; (3) Professional development work, which includes indicators of article writing, creation and use of media, and learning tools; and (4) Participation in scientific forums, with indicators of workshops, training, speakers, and seminar participants.

Based on the United Nations UNDP report on March 21, 2017, the HDI (Human Development Index) HDI (Human Development Index), Indonesia was ranked 113th out of 187 countries in 2015. Previously the HDI ranking for Indonesia in 2014 was 110th. The dynamics of Indonesia’s HDI component between 2014-2015 in the education sector can be seen, namely the number of students dropping out of school increased from 11% to 18.1%, for a fixed education gap of 20.8%.

The research phenomenon that occurred in SMK educational institutions in Mataram City showed that the level of teacher work productivity was still low, especially in terms of making learning tools, carrying out classroom action research, compiling enrichment and remedial programs, and making evaluation tools, which was only an average of 18, 55%, 24.18% and 64.96% (Dapodik, 2023).

In addition to this phenomenon, there is a research gap in previous research, namely between Kunartinah and Fajar and Slamet Rahardjo’s research with Suhartono. Kunartinah and Fajar and Slamet Rahardjo stated that job satisfaction has a positive and significant effect on work productivity. Meanwhile, Suhartono stated the opposite, namely job satisfaction has a negative and insignificant effect on work productivity. Then there is also a research gap between the research of Fauziyah, et al and Suhartono. Fauziyah, et al stated that organizational climate had a positive and significant effect on work productivity, while Suhartono stated the opposite, namely organizational climate had a negative and insignificant effect on work productivity (Sanosra et al., 2021).

The fundamental factor that is closely related to productivity is teacher satisfaction related to well-being. This satisfaction is motivated by factors, compensation for services, a sense of security, interpersonal relationships, conditions of the work environment, and self-opportunities. These five factors have not been fully realized in today’s teacher environment (Rapareni, 2013).
Low job satisfaction and organizational climate impact other aspects of learning. Teacher productivity in the context of lesson preparation has also decreased in quality. This condition appears when supervision is carried out regarding the preparation of learning tools, there are still many teachers who have not mastered the subject being taught. Not infrequently it is still found that in the preparation of devices they buy devices that are sold freely in the market. These conditions require the need for assistance in writing tools when they receive training in writing scientific papers or when they conduct research related to learning materials.

Work productivity requires a change in mental attitude based on work today must be better than yesterday, and tomorrow’s way of working is better than today, (Lestari et al., 2022). Teacher work productivity is the success of the teacher’s work in carrying out learning activities to achieve the expected quality of learning outcomes, (Wahyunet et al., 2019). Productivity is the comparison of a certain amount of output with a certain amount of input for a certain period (Muktii, 2017). Productivity is a measure of a person’s efficiency, it could also be the efficiency of a machine or system in turning inputs into outputs (Zuliahwati, 2016).

Low teacher productivity also results in student productivity so it is necessary to increase teacher productivity because at this time students’ interest in reading is also low. According to Jijyono (Zuliahwati, 2016), shows that the study of elementary school students’ willingness to read conducted by the International Association for Evaluation of Education (IEA) in 30 countries in the world shows a low willingness to read (Literacy Standard). Based on UNESCO data in Mustafa, the percentage of Indonesian reading interest is only 0.01 percent. In the last 20 years of research, Indonesia has experienced a decline in reading habits. Therefore, the products produced by the teacher are not only for promotion/class but to enrich the literacy/reading of the students they teach so that they will become students who comply with competency standards and can become companions for their students to improve their reading literacy (Harris & Sass, 2014; Shikdar & Sawaqeeed, 2003; Neal et al., 2000; Permarupan et al., 2013).

Work productivity includes the mental attitude and behavior of teachers who always have the view that the work carried out today must be of higher quality than the implementation of work in the past and that today’s work system is more effective and efficient than past work patterns and systems as well as future output. achieved in the future must be of higher quality and quantity than the current output. Indicators of work productivity include (a) having skills; (b) having a work ethic; (c) carrying out self-development; (d) service efficiency in education; (e) creating learning designs (Hambali, 2021; Sutikno, 2009), Effectiveness and efficiency are characteristics of educational productivity as a criterion or measure of educational productivity (Zuliahwati, 2016). Work productivity is measured based on 6 indicators including (1) Ability, (2) Increased results, (3) Self-motivation, (4) Self-development, (5) Quality, and (6) Efficiency.

The main factor that greatly influences work productivity is Participative leadership. Leadership is one part of management. Leadership plays a dominant, crucial, and critical role in all efforts to increase work productivity, both at the individual level, at the group level, and at the organizational level. Leaders must be able to manage the mindset of their subordinates which functions as a symbol of moral unity to express the work ethic and values that exist within the organization. Leaders in today’s dynamic conditions must be able to manage and allocate human resources efficiently, be able to set goals, focus on organizational goals, foster interpersonal and follower communication, and set the right direction in the event of organizational failures and setbacks (Setiawan, 2017). Leadership is an important factor in influencing individual and organizational productivity because leadership is the main activity where organizational goals can be driven and achieved.

Problems related to leadership are leaders who rarely involve their subordinates in making decisions, leaders who don’t give direction to employees, and leaders who rarely motivate employees, so in general the leader’s communication with employees is the problem. As a leader, one should not regard teachers as objects of exploitation, instead their subordinates are considered as friends and work partners. Teacher performance is greatly influenced by the principal’s leadership style and interpersonal communication (Permanna et al., 2019).

Leadership is everyone’s ability to influence and move their subordinates in such a way that their subordinates work with passion, are willing to work together and have the discipline that drives them to certain goals (Astinatria & Sarmawa, 2020). In line with the above understanding, leadership is the ability to influence followers to achieve a set goal (Purwanto et al., 2020). Bass (Priyono & Marnis, 2008), divides the leadership style into Participative leadership and autocratic leadership (Oupen et al., 2020). Participative leadership has the characteristics of individual influence, spiritual encouragement, and intellectual imitation.

They often consider the individual, build a vision and aim inward, create an open culture, trust staff to achieve their goals, and give full play to staff potential.

In a Participative leadership style, ideas can flow from below (members) because positions of control over solving a problem and making decisions are held alternately. The leader provides space for subordinates to be able to participate in making a decision as well as an atmosphere of friendship and trusting relationship between leaders and members (Rahadian & Suwandana, 2017). Participative leadership assumes that the decision-making process by the group should be the main focus of leadership (Astinatria & Sarmawa, 2020). This model is based on the assumptions: (1) to increase organizational effectiveness, (2) it must be implemented in schools that are supported by democratic values, (3) it becomes important in the context of school-based management where legitimate stakeholders share interests (Rokib & Santoso, 2018).

A comfortable work environment can make it easier for employees to get the job done well. Research shows that employees like a comfortable physical environment and adequate facilities (Azhari, 2019). Job satisfaction is an individual thing because each individual will have different levels of satisfaction according to the values that apply to each individual. The more aspects of work that are following individual wishes, the higher the level of satisfaction felt (Astinatria & Sarmawa, 2020). There are several basic approaches to assessing job satisfaction, outlining several ways to measure job satisfaction, including (1) Rating Scales; (2) Interviews; (3) Critical Incidents (Saragih & Suhendro, 2020).

Work climate is a human environment in which the workers of an organization do their work and its existence is something that cannot be touched or seen, but exists and can be felt by employees. The work climate can be created by the leadership in running the organization and its existence greatly influences the employees at work, so that it can be responded to negatively or positively by employees depending on the leadership in carrying out the policies of the organization to develop employee creativity at work (Ariani et al., 2020). Organizational climate is a systematic study of the duties, obligations, and responsibilities of a job, as well as the knowledge, abilities, and skills needed to do the job (Santiari et al., 2020). Organizational climate is the starting point for almost all personnel functions and this analysis is essential for developing ways of assessing human resources. Thus it is clear that organizational climate is very important for organizations to be able to provide a clear picture of the work that will be given to employees (Hanafi and Sanosra 2018). Organizational climate has 6 indicators, namely: (1) reward system, (2) convenience, (3) organizational structure, (4) contribution, (5) infrastructure, and (6) trust.

Another factor that can increase productivity is when there is a strong organizational commitment from its members. A person's commitment to an organization or company in the world of work is often a very important issue. Commitment to the organization is acceptance of the goals and values of the organization, where the degree of commitment is defined as the willingness to dedicate oneself to the values and goals of the organization (Yakob et al., 2019). Organizational commitment can moderate the influence of leadership on teacher work productivity because commitment can strengthen this influence while for the influence of organizational culture and job satisfaction on teacher work productivity organizational commitment is not moderating because it does not strengthen the effect Organizational commitment has a negative but not significant effect on teacher work productivity (Hayati et al., 2020).

Problems in commitment include a lack of understanding of school goals, a lack of feeling involved in activities held at school, and low loyalty to the school. This problem can be seen from the high rates of absenteeism and tardiness of teachers and employees and the lack of responsibility of teachers and employees for the tasks they carry out (Sugihandara & Supartha, 2015). Organizational commitment is the degree to which a person is involved in his organization and the strength of his identification with a particular organization. Organizational commitment is also characterized by three things, namely a strong belief in the organization as well as acceptance of the goals and values of an organization, a strong desire to maintain a strong relationship with the organization, and readiness and willingness to give up hard work for the benefit of the organization (Ariani et al., 2020). Organizational commitment is said to be a condition or degree to which an employee is in favor of a particular organization and its goals and intends to maintain membership in that organization (Fuadi, 2014). Mathis and Jackson (Retno et al., 2020), provide a definition, "Organizational Commitment is the degree to which employees believe in and accept organizational goals and desire to remain with the organization". organizational goals and will remain or will not leave the organization. Organizational commitment variables include 5 indicators, namely: (1) Affective commitment,
The research concept framework is indispensable for describing research questions and testing for knowledge. This study is to determine and explain the effect of the independent variable (X) on the dependent variable and the role of the mediating variable. The conceptual framework is described as shown in the following figure.

![Conceptual Framework](image)

Figure 1. Research model

Based on the research concept framework, the research hypothesis is formulated as follows: (1) Participative leadership has a positive and significant direct effect on organizational commitment; (2) Participative leadership has a positive and significant direct effect on work productivity; (3) Organizational climate has a positive and significant direct effect on organizational commitment; (4) Organizational climate has a positive and significant direct effect on work productivity; (5) Organizational commitment has a positive and significant direct effect on work productivity; (6) Participative leadership has a positive and significant indirect effect on work productivity through organizational commitment; and (7) Organizational climate has a positive and significant indirect effect on work productivity through organizational commitment (Mowday, 1998; Shagholi et al., 2011; Atak & Erturgut, 2010; Thay et al., 2013).

2 Materials and Methods

Research design

In a study, a researcher must use the right type of research. This is so that researchers can obtain a clear picture of the problems encountered and the steps used in overcoming the problem (Sugiyono, 2010). The type of research used in this study is a quantitative research method. Quantitative research is a type of research that uses a deductive-inductive approach (Surahman & Supardi, 2016). Quantitative research methods can also be interpreted as research methods based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, and data analysis is quantitative/statistical, to test established hypotheses. This method is referred to as the positivistic method because it is based on the philosophy of positivism. This method is a scientific method because it has met scientific principles, namely concrete/empirical, objective, measurable, rational, and systematic. This method is called a quantitative method because the research data is in the form of numbers and the analysis uses statistics (Gulo W, 2012).

Subjects and research samples

The population is all research subjects (Husna, 2017). The population is all data that concerns us in the scope and time that we determine. The population is a combination of all elements in the form of events, things, or people who have similar characteristics which are the center of attention of a researcher because it is seen as...
a research universe. Based on some of these opinions, it can be concluded that the definition of the population is the whole element of the object as a source of data with certain characteristics in a study. The population in this study were all SMK teachers in Mataram City, totaling 721 teachers from all SMK in Mataram City, totaling 7 schools.

The sample is part of the population, consisting of several members of the population (Leavy, 2022). The sample is part or representative of the population being studied because it is not possible to take the entire population, so in this study, the sample was used as the research subject (Grimes, 2012). The basis for sampling is to be able to conclude with some elements and the population as a sample for the entire population. The benefits of sampling are that it is cheaper, the accuracy of the results is better, the data collection is faster, and the availability of population elements. The sampling technique used by researchers is a probability sampling technique, namely a sampling method that provides equal opportunity for each element of the population to be selected as a sample. Sampling was carried out with certain considerations in sampling (Setyawarno, 2016). In this study, the sampling technique used the R.V. table. Krejcie and D.W. Morgan, from a population of 721 teachers, 186 teachers (respondents) were taken as a sample at random with an accuracy level (d2) of 95% and a significance level (z2) of 5% to estimate the proportion of the population (Gulo W, 2012).

Research instruments

Data are units of information recorded by media that are distinguishable from other data, can be analyzed, and are relevant to a particular program. Data collection is a systematic and standard procedure to obtain the required data. To collect research data, the authors use the questionnaire method (questionnaire). The questionnaire method is a list containing a series of questions regarding a problem or area to be studied (Agung, 2014). To obtain data, questionnaires were distributed to respondents (people who answered the questions asked for research purposes), especially in survey research (Zhou et al., 2019).

In this case, the writer makes written questions and then answered the respondent. And the form questionnaire is a closed questionnaire, which is a questionnaire in which the questions use a multiple-choice technique or there are already choices of answers so that the respondent only has to choose the desired answer. Data on work productivity, participative leadership, job satisfaction, organizational climate, and organizational commitment variables were collected using a questionnaire. The questionnaire used refers to the Likert scale model, with weights for positive statement answers as follows: Strongly Agree (SA) = 5, Agree (A) = 4, Less Agree (LA) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1. Then the variables and indicators in the research instrument are as in the following table

<table>
<thead>
<tr>
<th>Number</th>
<th>Variables</th>
<th>Indicators</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Participative Leadership (X1)</td>
<td>X1.1 inspiring personality</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X1.2 two-way communication</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X1.3 subordinate participation</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X1.4 work together</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X1.5 openness</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Organizational Climate; (X2)</td>
<td>X2.1 reward system</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X2.2 convenience</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X2.3 organizational structure</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X2.4 contribution,</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X2.5 infrastructure</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X2.6 trust</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Organizational Commitment (Y1)</td>
<td>Y1.1 Affective commitment</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Y1.2 Continuation commitment</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Y1.3 Normative commitment</td>
<td>8</td>
</tr>
</tbody>
</table>
The research instrument is a tool for researchers in using data collection methods. Functionally, the diversity of research instruments is to obtain the necessary data when the researcher has stepped on the step of gathering information in the field. To measure the expected data, a tool called an instrument is needed (Sinambela, 2014). The research instrument developed in this study was a questionnaire or questionnaire. There are two types of questionnaires, namely filled-in questionnaires and a variety of choices (Samsu, 2021). A questionnaire is a form in which respondents answer questions or statements by writing answers in writing according to what they experience or feel, while the multiple-choice questionnaire is a questionnaire in which respondents answer questions or statements by choosing one answer from the alternative answers provided in the questionnaire. In this study, the questionnaire was given randomly by taking into account each group, namely vocational teachers in various schools in the city of Mataram to achieve a balance (Agung, 2014).

**Technical data analysis**

Based on the research objectives in this dissertation and the characteristics of the PLS model analysis, the selection of the SEM-PLS analysis technique model as a data analysis tool in this study is expected to be able to show accurate data analysis results, especially in its predictive function of the variables that are the focus of this study. To test the effect of exogenous variables on endogenous variables or independent variables on the dependent variable, the "Structural Equation Model-Partial Least Square (SEM PLS)" technique is used. This PLS model approach is very suitable for prediction purposes. SEM PLS is a multivariate analysis that describes the application of several models which include: (1) canonical correlation techniques, (2) redundancy analysis, (3) multiple regression, (4) multivariate analysis of variance (Manova), and (5) principal component analysis (Garson, 2016). It was explained that SEM PLS is also suitable for causal-predictive analysis in situations of high complexity and is supported by weak theory.

### 3 Results and Discussions

**Results**

The results of the PLS-SEM analysis of the effect of Participative Leadership (1) Organizational Climate (X2) Organizational Commitment (Y1) on Work Productivity (Y2) using the Smart PLS application and the results of the analysis can be seen in the following figure.

<table>
<thead>
<tr>
<th>Y1.4 work contribution</th>
<th>Y2.1 Ability and work ethic</th>
<th>Y2.2 quality</th>
<th>Y2.3 effective and efficiency</th>
<th>Y2.4 Self-development</th>
<th>Y2.5 Record of learning outcomes</th>
<th>Y2.6 promotion</th>
<th>Y2.7 Innovative Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

Convergent validity

Based on the results of this analysis, an outer loading evaluation is carried out to see and determine whether the indicators used to form constructs or latent variables have fulfilled the valid requirements, and the results of the analysis of convergent validity are shown in the following table.

<table>
<thead>
<tr>
<th>Construct to indicator</th>
<th>Loading</th>
<th>Standard deviation</th>
<th>T-Statistics</th>
<th>P-Values</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1.1 &lt;- X1 Participative Leadership</td>
<td>0.876</td>
<td>0.017</td>
<td>52.912</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X1.2 &lt;- X1 Participative Leadership</td>
<td>0.908</td>
<td>0.012</td>
<td>76.531</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X1.3 &lt;- X1 Participative Leadership</td>
<td>0.906</td>
<td>0.014</td>
<td>63.988</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X1.4 &lt;- X1 Participative Leadership</td>
<td>0.849</td>
<td>0.027</td>
<td>31.356</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X1.5 &lt;- X1 Participative Leadership</td>
<td>0.827</td>
<td>0.018</td>
<td>44.949</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X2.1 &lt;- X2 Organizational Climate</td>
<td>0.776</td>
<td>0.037</td>
<td>21.159</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X2.2 &lt;- X2 Organizational Climate</td>
<td>0.799</td>
<td>0.033</td>
<td>24.080</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X2.3 &lt;- X2 Organizational Climate</td>
<td>0.831</td>
<td>0.024</td>
<td>34.377</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X2.4 &lt;- X2 Organizational Climate</td>
<td>0.810</td>
<td>0.024</td>
<td>33.505</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X2.5 &lt;- X2 Organizational Climate</td>
<td>0.798</td>
<td>0.031</td>
<td>25.618</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>X2.6 &lt;- X2 Organizational Climate</td>
<td>0.791</td>
<td>0.031</td>
<td>25.466</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y1.1 &lt;- Y1 Organizational Commitment</td>
<td>0.873</td>
<td>0.018</td>
<td>48.518</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y1.2 &lt;- Y1 Organizational Commitment</td>
<td>0.837</td>
<td>0.020</td>
<td>42.494</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y1.3 &lt;- Y1 Organizational Commitment</td>
<td>0.781</td>
<td>0.034</td>
<td>23.068</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y1.4 &lt;- Y1 Organizational Commitment</td>
<td>0.835</td>
<td>0.034</td>
<td>24.278</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y1.5 &lt;- Y1 Organizational Commitment</td>
<td>0.852</td>
<td>0.028</td>
<td>30.199</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y2.1 &lt;- Y2 Work Productivity</td>
<td>0.589</td>
<td>0.055</td>
<td>10.743</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y2.2 &lt;- Y2 Work Productivity</td>
<td>0.757</td>
<td>0.045</td>
<td>16.873</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y2.3 &lt;- Y2 Work Productivity</td>
<td>0.723</td>
<td>0.037</td>
<td>19.559</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y2.4 &lt;- Y2 Work Productivity</td>
<td>0.763</td>
<td>0.029</td>
<td>26.132</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y2.5 &lt;- Y2 Work Productivity</td>
<td>0.824</td>
<td>0.024</td>
<td>34.783</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Y2.6 &lt;- Y2 Work Productivity</td>
<td>0.825</td>
<td>0.019</td>
<td>42.826</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>
Based on the table above, convergent validity is the statistical value of the indicator factorial load of each latent construct. This means that a set of indicators represents and underlies one latent variable. The factorial load for each variable must be greater than 0.60 to show good convergent validity (Garson, 2016).

**Discriminant validity**

Discriminant validity is a path diagram process that shows the extent to which a latent construct discriminates against another latent construct, discriminant validity simultaneously states that a latent construct can explain the variance in the observed variables is greater than the variance of the unmeasured construct associated with measurement error (Pering, 2020). Table 3 shows the correlation between constructs based on discriminant validity.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Discriminant validity Fornell-Larcker Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct</td>
<td>Participative Leadership (X1)</td>
</tr>
<tr>
<td>X1 Participative Leadership</td>
<td>0.874</td>
</tr>
<tr>
<td>X2 Organizational Climate</td>
<td>0.801</td>
</tr>
<tr>
<td>Y1 Organizational Commitment</td>
<td>0.836</td>
</tr>
<tr>
<td>Y2 Work Productivity</td>
<td>0.764</td>
</tr>
</tbody>
</table>

Based on Table 3 it can be seen that Discriminant Validity has been fulfilled properly because the indicator has greater cross-loading on the construct compared to other constructs that are on the left or below it. In this study, there are two exogenous variables, namely Participative Leadership (X1) and Organizational Climate (X2), and two endogenous variables, namely Organizational Commitment (Y1) and Work Productivity (Y2).

Then on Average Variance Extracted (AVE), Composite Reliability, and Cronbach's Alpha Composite reliability are used as a reflective indicator that aims to measure the internal consistency of a construct and Cronbach's Alpha (0.70). Construct feasibility can be seen from Discriminant Validity (DV) through Average Variance Extracted (AVE). The results of the data analysis are presented in the following table.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Composite reliability, dan Cronbach's Alpha composite, average variance extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct</td>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>X1 Participative Leadership</td>
<td>0.922</td>
</tr>
<tr>
<td>X2 Organizational Climate</td>
<td>0.889</td>
</tr>
<tr>
<td>Y1 Organizational Commitment</td>
<td>0.895</td>
</tr>
<tr>
<td>Y2 Work Productivity</td>
<td>0.860</td>
</tr>
</tbody>
</table>

The reliability criteria for Cronbach's Alpha are more than 0.70, the rho is more than 0.70 and the Average Variance Extracted (AVE) is more than 0.50. It can be said that participative leadership (X1), organizational climate (X2), organizational commitment (Y1), and work productivity (Y2) have met the requirements of reliability. Thus the results of this analysis can be continued for hypothesis testing to determine the direct and indirect effects of the independent variables on the dependent variable. After evaluating and then carrying out the direct effect test is carried out to test the direct effect between the research variables whose results are listed in the table below.
Direct effect test

For the direct influence of a construct on other constructs following the research hypothesis, it can be seen by looking for the Path Coefficient accompanied by T-Statistics and P-Value which can be presented in Table 5

<table>
<thead>
<tr>
<th>Direct Effect</th>
<th>Loading</th>
<th>Standard Deviation</th>
<th>T Statistik</th>
<th>P Values</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 Participative Leadership -&gt; Y1</td>
<td>0.240</td>
<td>0.076</td>
<td>3.162</td>
<td>0.002</td>
<td>accepted</td>
</tr>
<tr>
<td>X1 Participative Leadership -&gt; Y2</td>
<td>0.342</td>
<td>0.097</td>
<td>3.542</td>
<td>0.000</td>
<td>accepted</td>
</tr>
<tr>
<td>X2 Organizational Climate -&gt; Y1</td>
<td>0.313</td>
<td>0.087</td>
<td>3.597</td>
<td>0.000</td>
<td>accepted</td>
</tr>
<tr>
<td>X2 Organizational Climate -&gt; Y2</td>
<td>0.196</td>
<td>0.083</td>
<td>2.366</td>
<td>0.019</td>
<td>accepted</td>
</tr>
<tr>
<td>Y1 Organizational Commitment -&gt; Y2</td>
<td>0.210</td>
<td>0.079</td>
<td>2.572</td>
<td>0.003</td>
<td>accepted</td>
</tr>
</tbody>
</table>

Based on the results of the analysis in the table above, the results of the research are explained as follows:

1) Hypothesis-1; The direct relationship between participative leadership and organizational commitment is shown by the coefficient of 0.240 and the T-statistic of 3.162 which is greater than 1.96 and the P-Values of 0.002 which is smaller than 0.05. The result is that H0 is rejected while H1 is accepted. It is significant to organizational commitment, this means that increased Participative leadership makes organizational commitment increase.

2) Hypothesis-2; The direct relationship between participative leadership and work productivity is shown in the coefficient of 0.342 and the T-statistic of 3.542 which is greater than 1.96 and the P-Values of 0.000 which is smaller than 0.05. The result is that H0 is rejected while H1 is accepted. It is significant to work productivity. This means that the increase in Participative leadership makes work productivity increase.

3) Hypothesis-3; The direct relationship between organizational climate and organizational commitment is shown by the coefficient of 0.313 and the T-statistic of 3.597 which is greater than 1.96 and the P-Values of 0.000 which is smaller than 0.05. The result is that H0 is rejected while H1 is accepted. It is said that organizational climate has a direct positive effect and is significant to organizational commitment, this means that an increase in organizational climate makes organizational commitment increase.

4) Hypothesis-4; The direct relationship between organizational climate and work productivity is shown in the coefficient of 0.196 and the T-statistic of 2.336 which is greater than 1.96 and the P-Values of 0.019 which is smaller than 0.05. The result is that H0 is rejected while H1 is accepted. It is significant to work productivity. This means that an increase in organizational climate makes work productivity increase.

5) Hypothesis-5 The direct relationship between organizational commitment and work productivity is shown by the coefficient of 0.210 and the T-statistic of 2.572 which is greater than 1.96 and the P-Values of 0.003 which is smaller than 0.05. The result is that H0 is rejected while H1 is accepted. It is said that organizational commitment has a positive and significant direct effect on work productivity. This means that the increase in organizational commitment makes work productivity increase.

Furthermore, the results of the indirect influence test aim to see the role of job satisfaction (Y1) as a mediating variable in the influence of leadership (X) on teacher performance (Y2), the results are as in the following table
Indirect effect test

Then the results of the analysis of indirect effects between variables are shown in the following table 6

<table>
<thead>
<tr>
<th>Indirect Effect</th>
<th>Mediation</th>
<th>Loading</th>
<th>Standard Deviasi</th>
<th>T Statistik</th>
<th>P Values</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 Participative Leadership -&gt; Y1 Organizational Commitment -&gt; Y2 Work Productivity</td>
<td>Y1</td>
<td>0,076</td>
<td>0,019</td>
<td>4,034</td>
<td>0,000</td>
<td>accepted</td>
</tr>
<tr>
<td>X2 Organizational Climate -&gt; Y1 Organizational Commitment -&gt; Y2 Work Productivity</td>
<td>Y1</td>
<td>0,085</td>
<td>0,026</td>
<td>3,239</td>
<td>0,002</td>
<td>accepted</td>
</tr>
</tbody>
</table>

6) Hypothesis-6; The indirect relationship between participative leadership and work productivity through organizational commitment is shown in the coefficient of 0.076 and the T-statistic of 4.034 which is greater than 1.96 and the P-Values of 0.000 which is smaller than 0.05. The result is that H0 is rejected while H1 is accepted. In a positive and significant way toward work productivity through organizational commitment, this means that organizational commitment can mediate the indirect influence of Participative leadership on work productivity.

7) Hypothesis-7; The indirect relationship between organizational climate and work productivity is shown in the coefficient of 0.085 and the T-statistic of 3.239 which is greater than 1.96 and the P-Values of 0.002 which is smaller than 0.05. The result is that H0 is rejected while H1 is accepted. It is said that organizational climate has an indirect effect positive and significant to work productivity. This means that organizational commitment can mediate the indirect influence of Participative leadership on work productivity.

The findings of this study are that Participative leadership has a direct and significant effect on organizational commitment and work productivity. Participative leadership has a direct and significant effect on organizational commitment and work productivity. In addition, organizational commitment can mediate participative leadership and organizational climate has an indirect effect on work productivity, so organizational commitment becomes a full media (Bahrami et al., 2016; Pritchard & Karasick, 1973; Kawiana et al., 2018; Pant & Yadav, 2016).

Discussion

This section will describe the discussion of research results based on the hypothesis about the direct and indirect influence of the independent variables on the dependent variable as follows;

1) Participative leadership has a direct positive and significant effect on organizational commitment, this means that increased Participative leadership makes organizational commitment increase. The Participative leadership character that gives trust and the opportunity to be involved in thinking about goals can increase commitment so that teachers are more solid in advancing and realizing school programs together. This is in line with the results of research conducted by (Insan & Yuniawan, 2016) and (Rokib & Santosos, 2018).

2) Participative leadership has a positive and significant direct effect on work productivity. This means that the increase in Participative leadership makes work productivity increase. Participative leadership by involving teachers being creative to improve their work results, especially in vocational schools that require innovation that can produce products that are beneficial to the competence of students.
Research conducted (Astinatria & Sarmawa, 2020), found that teachers are more productive when given sufficient space to be creative (Yuneti et al., 2019).

3) Organizational climate has a positive and significant direct effect on organizational commitment, this means that an increase in organizational climate makes organizational commitment increase. Conducive school conditions and an atmosphere that guarantees increased performance and the existence of rules and guarantees for the dedication of teachers will strengthen teacher loyalty to schools. Research conducted by (Ani et al., 2018), found that the occurrence of a school climate that meets teacher expectations and accommodates teacher wishes can increase commitment to advancing schools. The same thing was done in research (Azhari, 2019).

4) Organizational climate has a positive and significant direct effect on work productivity. this means that the increase in organizational climate makes work productivity increase. The leadership’s policy to create a comfortable working atmosphere in schools, and service infrastructure becomes a reinforcement for teachers to increase work productivity, which ultimately has an impact on improving quality. In line with the results of research conducted (Suwandi & Syaefudin, 2018), and in line with the results of research (Hardjana, 2013).

5) Organizational commitment has a positive and significant direct effect on work productivity. this means that the increase in organizational commitment makes work productivity increase. The character of organizational commitment to a teacher is always ready to support school programs. If teachers commit, they will certainly be able to improve their performance. This is like the results of research conducted (Nursanti, 2017), in line with the results of research (Yakob et al., 2019).

6) Participative leadership has a positive and significant tidal effect on work productivity through organizational commitment. this means that organizational commitment can mediate the indirect influence of Participative leadership on work productivity. Participative leadership has a direct effect on teacher work productivity, and leadership also has a direct effect on commitment, so indirectly participative leadership certainly influences work productivity through commitment as a mediating variable. Similar research was carried out by (Fuadi, 2014) and (Lestari et al., 2022).

7) Organizational climate has a positive and significant indirect effect on work productivity. this means that organizational commitment can mediate the indirect influence of Participative leadership on work productivity. Organizational climate has been able to influence productivity, then indirectly through organizational commitment also has an effect. This organizational commitment can mediate organizational climate on work productivity. Similar research results were conducted by (Sanosra et al., 2021) and (Saragih & Suhendro, 2020).

The research findings are that Participative leadership and organizational climate influence directly or indirectly the work productivity of teachers in SMK Kota Mataram. Organizational commitment can mediate the indirect influence of Participative leadership and organizational climate on work productivity, thus commitment acts as a full mediation.

4 Conclusion

Based on the results of the analysis and discussion it can be concluded that; (1) Participative leadership has a direct positive and significant effect on the commitment and work productivity of SMK teachers in the city of Mataram; (2) organizational climate has a direct positive and significant effect on the commitment and work productivity of SMK teachers in the city of Mataram; (3) participative leadership and organizational climate have an indirect effect on the work productivity of SMK teachers in Mataram City through organizational commitment. Thus, it can be said that organizational commitment can play a full mediation role.

Recommendations from the results of this study to education providers in Mataram City, especially those in charge of Vocational Schools, to apply Participative leadership and maintain an organizational climate in increasing work productivity by involving organizational commitment as a mediating variable. For other researchers, the results of this study can be used as a reference in addition to scientific research studies related to the work productivity of vocational school teachers.
Acknowledgments
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References


Biography of Authors

**Abdul Kadir Jaelani**  
He is a Doctoral Student Program at Ganesha University of Education. A lecturer at Pariwisata Polytechnic in Bali, Indonesia  
*Email: abdul.kadir.2@undiksha.ac.id*

**Prof. Dr. Anak Agung Gede Agung, M.Pd,**  
He is a Lecturer of the Postgraduate Program at Ganesha Singaraja University of Education, Singaraja, Indonesia  
*Email: agung2056@undiksha.ac.id*

**Prof. Dr. Made Yudana, M.Pd.**  
He is a Lecturer of the Postgraduate Program at Ganesha Singaraja University of Education, Singaraja, Indonesia  
*Email: madeyudana@undiksha.ac.id*

**Dr. Kadek Rihendra Dantes, ST, MT**  
He is a Lecturer of the Postgraduate Program at Ganesha Singaraja University of Education, Singaraja, Indonesia  
*Email: rihendra.dantes@pasca.undiksha.ac.id*