

## THE ROLE OF MOTIVATION IN TEACHING AS A PILLAR OF RESILIENCE FOR ELEMENTARY SCHOOL TEACHERS IN PAPUA

Simon Petrus<sup>1\*</sup>, Joko Widodo<sup>2</sup>, Haryono<sup>3</sup>, Suwito<sup>4</sup>

<sup>1,2,3,4</sup>Universitas Negeri Semarang, Semarang, 50299, Indonesia,

Corresponding email : simonpetrus821@gmail.com

### Abstract

The research entitled "The Role of Motivation in Teaching as a Pillar of Resilience for Elementary School Teachers in Papua" aims to measure the contribution of the role of motivation in teaching to the level of resilience of elementary school teachers in Mimika, Papua. The research employed a quantitative approach and data was collected through questionnaires from 341 elementary school teachers in Mimika, Papua. Data were analyzed using PLS Structural Equation Modeling (SEM), Connor-Davidson Resilience Scale (CD-RISC), Work Task Motivation Scale for Teachers (WTSMT) to measure effect of motivation, resilience, and the role of motivation in teaching consecutively. The research results indicate that (1) the role of motivation in teaching has a positive and significant effect on teacher resilience, (2) all indicators in the model were valid in measuring the constructs as well as all constructs met the reliability criteria, and (3) teacher resilience is important to maintain commitment to providing quality education. To conclude, the role of motivation in teaching is an important factor in preventing burnout and has an effect on increasing teacher resilience. Thus, this research recommends the importance of increasing teacher motivation to support and increase resilience. This study is important for the field of educational management because it provides insight into factors that can increase teacher resilience and it is also relevant to the education sector in Mimika, Papua.

**Keywords:** *Burnout, Resilience, Teaching Motivation.*

### Introduction

Motivation and resilience are two important aspects for an individual's success and are the foundation for success, resilience and personal development. While motivation is the driving force to achieve goals, resilience is the ability to rise and develop positively in the face of life's trials and obstacles. This extraordinary fact has been revealed by various studies where motivation is not only a driver for achieving goals, but is also the main driving force behind increasing individual resilience. Unfortunately, in the world of education, research on motivation is mostly related to performance, achievement and psychological well-being. Even though motivation can be a key element in creating strength and endurance in facing complex educational challenges (Xie, 2023).

Understanding the dynamics of the relationship between motivation and resilience is becoming increasingly important, especially in the context of education and work environments in challenging regions, for example Papua. Motivation can be considered as a form of magic or art in forming resilience among teachers in Papua. With socio-economic conditions, infrastructure and difficult geographical locations, teachers are faced with the need for a high level of resilience

compared to teachers in other areas. In Papua, teachers are not only faced with academic demands, but teachers must be able to overcome various challenges, ranging from limited infrastructure, cultural differences, etc. In facing this complexity, an extraordinary question arises: can motivation be the key to increasing teacher resilience in Papua?.

Teachers have a very important role in the education system in Indonesia and are the main indicator for evaluating the quality of education (García-Arroyo et al., 2019). Not only teaching academics, teachers will be role models who provide motivation, shape character and instill values for life (Radil et al., 2023; Ramberg et al., 2020). As a profession that requires self-devotion, caring, high communication skills and great emotional investment (Lozano-Peña et al., 2021; Mamo, 2022), So the teaching profession is certainly a profession that is vulnerable to conditions of fatigue or burnout (Hossain & Sultana, 2022; Lozano-Peña et al., 2021) which not only has an impact on poor teacher performance but also affects classroom management skills, also causes an increase in problematic behavior and low student achievement and has an impact on teacher absenteeism, namely whether or not teachers are often absent from work and teacher resignations from the profession Caruso (2019). Currently, this is a major problem faced by educational institutions in many countries (Hossain & Sultana, 2022).

Resilience is the ability to adapt, overcome and bounce back in the face of adversity. Resilience is also a protective factor in reducing stress or burnout (Li, 2023). Higher resilience is associated with less burnout and also reduced levels of burnout (Daniilidou et al., 2020). Teachers who have resilience will make a significant contribution to a country's education system and tend to survive in difficult conditions and adapt more easily to change (Lozano-Peña et al., 2021). Köksoy & Kutluer (2023) emphasizes the importance of fostering resilience among teachers as a way to maintain commitment to providing quality education. Teacher motivation plays an important role in preventing burnout. Teachers who have strong motivation will experience less burnout (Caruso, 2019). If resilience is important in enabling teachers to overcome stress that has the potential to cause burnout, then the role of motivation is much more important, because motivation is a predictive variable of teacher resilience and motivation increases resilience itself.

This research aims to measure the extent to which the role of motivation in teaching contributes to the level of teacher resilience, especially in the Timika Papua region. The results of this research will provide insight into the level of teacher motivation and resilience and also provide input regarding what factors can increase teacher resilience. In this way, actors in the world of education can develop strategies and interventions including more appropriate approaches to support and increase teacher resilience and ultimately improve the quality of education in Papua.

### **Hypothesis**

The hypothesis of this research is that the role of motivation has a positive effect on teacher resilience

## Research method

Research data was obtained from the results of filling out a questionnaire and analyzed using the SEM PLS technique.

## Research Design

The approach used in this research was a quantitative approach. The variables examined in this research are teacher motivation and resilience. Resilience is a person's ability to overcome anxiety, stress, reactions to stress and even depression which consists of 5 dimensions, namely (a) personal competence which means the individual's ability to achieve goals even if they experience setbacks or failures and indicators in this aspect are being able to become a competent individual as well as be a tenacious individual and have high standards ; (b) trust is one's instincts which means calmness in acting and the indicators in this aspect are trusting instincts, being tolerant of bad things and being able to overcome the consequences of stress ; (c) Positive acceptance of change and secure relationships which means that the ability to accept difficulties with a positive attitude and even if you experience difficulties you will still be able to relate to other people. Indicators in this aspect are being able to accept change positively and being able to maintain good relationships with other people ; (d) control and factor, the ability to control oneself and achieve goals and indicators in this aspect are the ability to control oneself as well as being able to control oneself; and (e) spiritual influences, the ability to always fight because of one's belief in God and destiny and indicators in this aspect are belief in God and belief in destiny.

Moreover, motivation is an internal and external drive within a person which is indicated by desires and interests, drives and needs, hopes and ideals, appreciation and respect. Motivation has five dimensions such as (1) Intrinsic Motivation ;(2) Identified Motivation; (3) Introjected Regulation; and (4) External Regulation and (Amotivation)

## Population and Sample

This research was conducted on 341 elementary school teachers from 74 elementary schools in Mimika district, Papua.

## Instruments

Resilience was measured using the Connor-Davidson Resilience Scale (CD-RISC), a measuring tool developed by Connor Davidson (2001) to measure high standard personal competence, trust in one instinct, positive acceptance of change and secure relationships and control. Meanwhile, motivation was measured using the WTSMT (The Work Task Motivation Scale for Teachers) measuring instrument developed by Fernet (2008) to measure Intrinsic Motivation, Identified Motivation, Introjected Regulation, External Regulation and Amotivation.

## Procedures

Data collection was carried out through questionnaires using random sampling from teachers spread across various Mimika districts, Papua. Then, the data was analyzed using PLS (Partial Least Square), namely a component or variant-based SEM structural equation model.

## Results

In this research, the influence of teacher work motivation on teacher resilience was analyzed using the SEM PLS analysis technique. The stages in SEM PLS analysis consist of the Outer Model test stage and the Inner Model test stage (Hair Jr. et al., 2017). Outer model testing is carried out to test the validity and reliability of the construct, while inner model testing is carried out to test the relationship between variables.

### Outer Model Testing

**Convergent validity** is carried out to determine the level of validity of each relationship between the indicator and its latent construct. In this test, indicators are declared valid if they have a loading factor value  $> 0.7$  and each construct has an AVE value  $> 0.5$  (Hair Jr. et al., 2017). In this research, the convergent validity test was carried out in 2 steps, the initial step showed that there were invalid indicators in measuring the constructs of Motivation (Mot1, Mot14, Mot15, Mot5, Mot7 and Mot8) and Resilience (Res 10, Res11, Res18, Res3, Res5 and Res9). All invalid indicators were then removed from the model and the SEM PLS model was estimated again. The outer model test results in Table 1 show that after all invalid indicators were removed from the model, all remaining indicators in the PLS model were valid in measuring the construct because they had a loading factor value  $> 0.7$  and an AVE value  $> 0.5$ .

**Discriminant validity** is carried out to ensure that each concept of each latent variable model is different from other variables. In this test, the indicator is declared to have met the required discriminant validity criteria if the HTMT between constructs is below 0.9 (Hair Jr. et al., 2017). In a different way, discriminant validity can also be tested with Fornell Larcker's value method  $\sqrt{AVE}$  which always exceeds the correlation between constructs, indicating that the discriminant validity of the construct being tested is fulfilled.

The results of the discriminant validity test in Table 2 showed that the HTMT value between constructs does not exceed 0.9, likewise the Fornell Larcker Test shows a value of  $\sqrt{AVE}$  which always exceeds the correlation between constructs, which means that discriminant validity has been met by each construct.

### Composite Reliability and Cronbach Alpha

*Composite Reliability* measures the true reliability value of a variable, while Cronbach Alpha measures the lowest value (lower bound) of the reliability of a variable (Hair Jr. et al., 2017). In measuring construct reliability, the required Cronbach's alpha value is  $> 0.7$ , as well as the required composite reliability value is  $> 0.7$  (Hair Jr. et al., 2017). The results of the construct reliability

test in Table 1 show that the Cronbach's alpha value for all constructs is  $> 0.7$  as well as the composite reliability value for all constructs  $> 0.7$ , which means that all constructs in the SEM PLS model have met the required reliability criteria.

**Table 1 Convergent Validity and Reliability**

<b>Indicator</b>	<b>Loading Factor 1st order</b>	<b>Loading Factor 2nd order</b>	<b>AVE</b>	<b>CR</b>	<b>Cronbach's Alpha</b>
<b>Motivation</b>			0.666	0.947	0.937
Mot2	0.904	0.735			
Mot3	0.926	0.830			
Mot4	0.939	0.829			
Mot6	0.939	0.827			
Mot9	1.000	0.737			
Mot10	0.862	0.826			
Mot11	0.891	0.868			
Mot12	0.864	0.832			
Mot13	1.000	0.847			
<b>Resilience</b>			0.674	0.971	0.968
Res1	0.886	0.816			
Res2	0.888	0.825			
Res4	0.886	0.842			
Res6	0.877	0.825			
Res7	0.881	0.817			
Res8	0.863	0.849			
Res12	0.935	0.849			

Res13	0.948	0.856
Res14	0.899	0.817
Res15	0.887	0.771
Res16	0.888	0.761
Res17	0.719	0.732
Res19	0.829	0.857
Res20	0.926	0.862
Res21	0.918	0.853
Res22	0.781	0.787

**Tabel 2 Discriminant Validity**

	<b>Motivasi</b>	<b>Resiliensi</b>	
	0.816 <sup>b</sup>	0.683 <sup>a</sup>	<b>Motivasi</b>
<b>Resiliensi</b>	0.659 <sup>c</sup>		0.820 <sup>b</sup>

<sup>a</sup> HTMT; <sup>b</sup> ; <sup>c</sup> coefficient of correlation  
 $\sqrt{AVE}$

**Inner Model Testing**

Inner model testing includes assessing the goodness of fit of the structural model, assessing the path coefficient, testing the significance of the partial influence of exogenous variables on endogenous variables and calculating the coefficient of determination. The test results at this stage can be used to test the research hypothesis.

**Goodness of Fit PLS Model**

The goodness of fit of the SEM PLS model can be seen from the R Square, Q Square and SRMR model values. The R square value shows the strength of the model in predicting endogenous variables. The R Square value ranges from 0-1 and is categorized into 3 categories, namely strong (strong), quite strong (moderate) and weak (weak). According to Chin (1998), an R square value >0.67 indicates that the PLS model is in the strong category, an R Square value between 0.33 – 0.67 indicates that the PLS model is in the moderate category and an R Square value between 0.19 – 0.33 shows that the PLS model is in the weak category. Meanwhile, the Q Square value of the model shows the level of predictive relevance of the model. The Q square value is categorized into

3 categories, namely small, medium and large, a Q square value of 0.02 – 0.15 is declared small, a Q square value of 0.15 – 0.35 is declared medium and a Q square value of >0.35 declared large. The SRMR model is related to the sample's ability to explain the population. SRMR values are categorized into 2 categories, namely perfect model fit if SRMR <0.08; The model is fit if SRMR is between 0.08 – 0.10 and the model is not fit if SRMR > 0.10. The analysis results in Table 3 show that the SEM PLS model estimated to be fit with the data analyzed, because it has model strength in the moderate category (quite strong), high predictive relevance and the SRMR value of the model is within the fit criteria. Therefore, this model can be considered suitable for testing research hypotheses.

**Table 3 Goodness of Fit Model**

	Dimension / Variable	R <sup>2</sup>	R <sup>2</sup> Adjusted	Criteria R <sub>2</sub>	Q <sup>2</sup>	Criteria Q <sub>2</sub> srmr
0.09  (Fit)	AMOT	0.718	0.717	strong	0.71	big
	CTRL	0.905	0.905	strong	0.69	big
	EXT	0.933	0.932	strong	0.705	big
	IDENT	0.777	0.777	strong	0.681	big
	INTRO	0.543	0.542	moderate	0.535	big
	INTR	0.736	0.735	strong	0.609	big
	PASR	0.886	0.886	strong	0.602	big
	PCTH	0.888	0.888	strong	0.682	big
	TTS	0.821	0.821	strong	0.702	big
	Resiliensi	0.424	0.422	moderate	0.283	medium

Source: Data processed by SmartPLS (2023)

**Direct Influence**

In SEM PLS analysis, the direct influence between variables can be seen from the p value and T statistics. At a significance level of 5%, an exogenous variable is declared to have a significant effect on endogens if the p value is <0.05 or the T statistic is > 1.65 (one tail) and the T statistic is > 1.96 (two tail). The direction of influence (positive effect/negative effect) is assessed from the sign accompanying the path coefficient.

**Table 7 Dirrect Effect**

	Original Sample	Sample Mean	Standard Deviatio	T Statistics	P Values
Motivasi -> Resiliensi	0.651	0.654	<u>n</u> 0.071	9.165	0.000

The results of the analysis in the table above showed a  $p$  value of 0.000, because the  $p$  value obtained is  $<0.05$ , it is concluded that teacher work motivation has a positive and significant effect on teacher resilience.

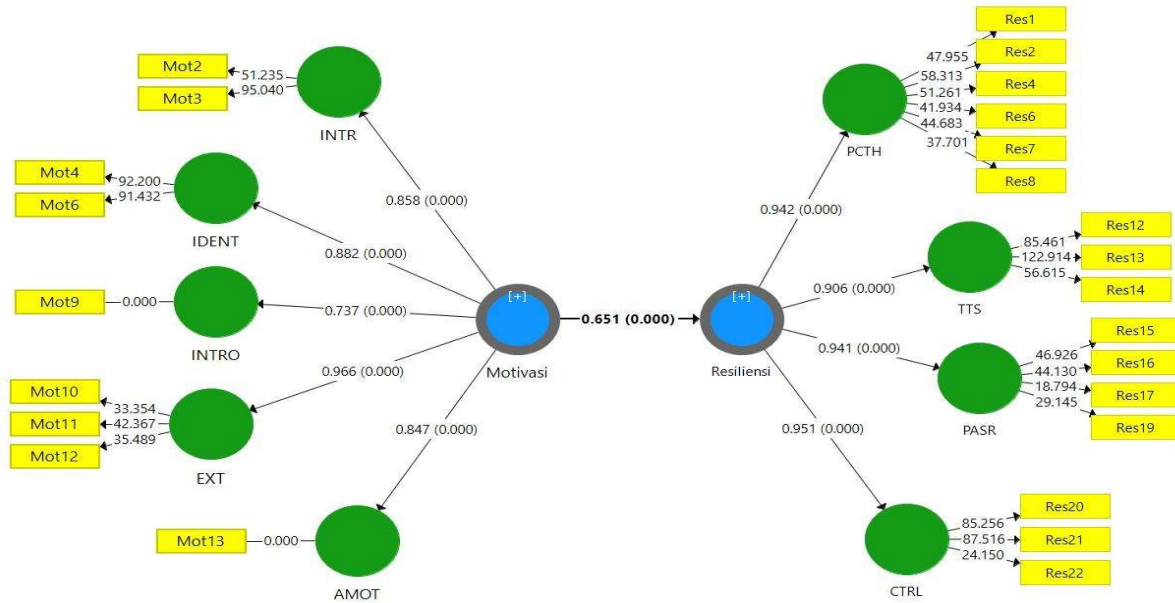


Figure 1. PLS Bootstrapping Model Estimation Results

### Discussion

The results of this research identified that there was a positive influence of teacher work motivation on teacher resilience. Teachers with high work motivation tend to have high resilience, whereas teachers with low work motivation tend to have low resilience. The results of this research are in line with the results of research (Trigueros et al., 2020) which showed that there was a positive influence of work motivation on teacher resilience. In this research, apart from work motivation, transformational leadership is also a factor that significantly influences teacher resilience.

The results of this research also support the results of previous research conducted by (Hatlevik & Bjarnø, 2021) which showed a relationship between teacher motivation using digital technology and teacher resilience as well as research conducted by (Çelik, 2018) which examined the relationship between teacher motivation and tenacity and motivation. and (Mansfield et al., 2016) which indicated the results that to build teacher resilience, motivation was the main point that must be considered. The results of this research are also in line with the results of research (Suprpto et al., A2021) which also showed a relationship between teacher work motivation and teacher resilience. Other studies that are also in line with the results of this research are (Ahmd et al., 2020; Ang et al., 2022; Carmel & Badash, 2021; Crompton et al., 2023; Han, 2022; Peel et al., 2023; Pulungan et al., 2022; Raghunathan et al., 2022; Ramakrishna & Singh, 2022; Rich et al., 2023; Xu, 2021; Yang & Wang, 2022), in this study it can be concluded that teacher work motivation is one of the factors that has a very important influence on teacher resilience.



## Conclusion

The findings as well as results of this research reveal that there is a positive influence of teacher motivation on teacher resilience. Teachers with high work motivation tend to have high resilience, whereas teachers with low work motivation tend to have low resilience.

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