

## Mediation of Rank on the Correlation of Perception and Motivation of Physical Education, Sports and Health Teachers on Interest in Educational Book Publications

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
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### Abstract

Educational books as a sub element of scientific publications are rarely sought after in continuing professional development activities by Elementary School Physical Education, Sports and Health Teachers in Sukoharjo Regency in 2021. This study aims to analyze the correlation of perceptions and motivations towards interest in publishing books in the field of education with rank as a variable mediation. This research was conducted in State Elementary Schools in Sukoharjo Regency. The study population was all teachers of Physical Education, Sports and Health totaling 363 teachers. The instrument used in this research is a questionnaire. The method used is descriptive correlation with a quantitative approach without treatment and manipulation of the research sample. Quantitative data collected in the form of numbers. Analysis of the data used is multiple regression analysis and path analysis. The results of research on Elementary School Physical Education, Sports and Health Teachers in Sukoharjo Regency in 2021 stated that there wasn't significant effect of perception on interest in publishing books in the field of education through rank with a direct influence coefficient value of 0.109 and an indirect influence coefficient value through rank of 0.058 , and there wasn't significant effect of motivation on interest in publishing books in the field of education through rank with a direct influence coefficient value of 0.215 and an indirect influence coefficient value through rank of 0.141.

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## INTRODUCTION

Professional development consists of all natural learning experiences and activities that are realized and planned with the aim of being able to provide direct and indirect benefits to individuals, groups or schools and be able to contribute to the quality of education in the classroom (Day, 1999) in (Murphy & Paor, 2017). Meanwhile, sustainable professional development is an effort to fulfill future needs and demands related to the profession as a teacher, especially to increase four teacher competencies, namely pedagogic, professional, social and personality competencies (W. Rohmah, 2016). Continuous professional development for teachers is one of the main elements given credit points for promotions or functional positions mandated in the regulation of the State Minister for Administrative Reform and Bureaucratic Reform Number 16 of 2009 concerning Teacher Functional Positions and Credit Scores (Winarno, Trisnamansyah, Mulyasa, & Arifin, 2018).

The elements contained in sustainable professional development are carried out through self-development, scientific publications, and or innovative works (Rusdarti, Slamet, & Sucihatiningsih, 2018). Books in the field of education are one of the sub-elements of scientific publications in the implementation of sustainable professional development among textbooks, lesson modules/dictations, teacher manuals and translation works (Kemendiknas, 2010).

The dynamics in implementing sustainable professional development include not being well organized (Qader, 2020). In addition, the implementation of sustainable professional development for teachers has not yet been fully implemented (Maksum, 2015). Barriers to continuous professional development from within the teacher are: (1) weak intention to participate in continuous professional development, (2) lack of time (3) unstable health, (4) limitations in implementing ICT, and (5) less active in contributing their ideas when in the teacher's working group (Hasanah, 2018).

Scientific publications are an access road for authors of a study to disseminate new findings from their research (J. V. Amalia, 2020). The obstacle faced in scientific publication activities for teacher professional improvement is the limited ability of teachers to write so that it affects teachers who are reluctant to write and publish their scientific works (Hadi, 2018). In addition, the implementation of the activities carried out was not able to meet all the sub-elements of continuous professional development and the credit score obtained did not meet the minimum requirement (Wuryandini, 2014).

Given the importance of continuous professional development for teachers and the various problems faced, it is necessary to implement it for all teachers, including teachers of Elementary School Physical Education, Sports and Health. Physical education is a unified phase of the educational process as a whole with the use of individual movement abilities voluntarily as a medium, and still gives direct meaning to mental, emotional, and social development (J.E. & Jewett, A.E., 1990) in (Kanca, 2018). The purpose of physical education is an effort to form children by focusing on the development of attitudes or values, intelligence, physical, and (psychomotor) skills, leading to the maturity of self-reliance in students that can be used as a provision for daily life (Suryobroto, 2004: 8) in (Susilo, 2018).

The phenomenon of the problem of implementing scientific publications in sustainable professional development activities occurs in Elementary School Physical Education, Sports and Health teachers in Sukoharjo Regency. Based on preliminary research data on sixty-seven Elementary School Physical Education, Sports and Health Teachers in Sukoharjo Regency in 2021, it is known that the percentage of types of scientific publications that are most often used in research reports reaches 44.44 %, while the percentage that is rarely used in the implementation of professional development sustainability is the publication of books in the field of education by 0%.

The lack of interest in Elementary School Physical Education, Sports and Health Teachers in Sukoharjo Regency towards book the field of education publication needs attention so that these activities are more useful and run in harmony, harmony and balance. Interest is a sense of preference and a sense of interest in a thing or activity, without anyone telling (Slameto, 2010: 180) in (Wahyuni & Setiyani, 2017). The lack of interest in publishing books in the field of education cannot be separated from various other aspects. This study analyzes the effect of perception and motivation on interest in publishing books in the field of education with the role of rank as a mediating variable.

The essence of perception is a cognitive process in each individual as a process to be able to understand information that comes from the environment through his senses (Vernanda, Rahayu, & Handayani, 2016). While motivation is a movement by a certain person or group due to various efforts made to achieve the desired and desired goals and satisfaction can be obtained for their actions (Wirastri, Deliana, & Mukarromah, 2017). Furthermore, according to the Big Indonesian Dictionary that rank can be interpreted as a level in a staffing position.

Based on observations from several studies that have been carried out previously, there has been no research on the mediation of rank on the influence of perception and motivation on interest in publishing books in the field of education as a sub-element of scientific publications in sustainable professional development, so this study discusses mediation of rank on the correlation of perceptions and motivations of Physical Education, Sports and Health teachers in Elementary Schools towards the interest in publishing books in the field of education.

## METHOD

The type of research used is correlational research with a quantitative approach. This study was designed to obtain various information during the research without any treatment and manipulation of the research

sample as in experimental research. The data analysis technique used is multiple regression analysis and path analysis with the help of the IBM SPSS 25 computer program at a significance level ( $\alpha$ ) of 0.05. Perception and motivation as independent variables, rank as mediating variable and interest in publishing books in the field of education as dependent variables. The population of this study were Elementary School Physical Education, Sports and Health Teachers with the status of Civil Servants and State Civil Apparatuses in Sukoharjo Regency totaling 363 teachers. This research was conducted for 1 month using the questionnaire method as a research instrument. The instrument includes a questionnaire of perceptions, motivations, rank and interest in the publication of books in the field of education which has previously been tested on respondents outside the research sample with almost the same characteristics, then tests the validity and reliability values provided that the statement items are valid and reliable to be used as a statement item on the research instrument.

## RESULT AND DISCUSSIONS

This research was conducted at State Elementary Schools throughout Sukoharjo Regency in 2021. The research sample consisted of all Elementary School Physical Education, Sports and Health Teachers with the status of State Civil Apparatus. Samples were taken randomly with a proportional area sampling technique in (Sugiyono, 2017:83). The research sample consisted of 156 Elementary School Teachers of Physical Education, Sports and Health.

Based on the research process carried out, obtained ordinal data which is transformed into interval data with the Method of Successive Interval from (Riduwan & Kuncoro, 2017:30-36) in order to fulfill the requirements for path analysis. Description of research variables is done by grouping into criteria according to certain intervals with a Likert scale in seven categories. There are excellent, very good, good, fairly good, fairly, poor, very poor for

descriptions of perceptions and rankings of publications of book field of education. There are extremely, very high, high, fairly high, low, very low, extremely low categories for descriptions of motivation and interest in publications of book field of education. The results of the description are presented in the following percentage table:

**Table 1.** Percentage of Perception Variable Criteria and Rank

No	Criteria	Variable Percentage (%)	
		Perception	Rank
1.	Excellent	2	4
2.	Very good	28	7
3.	Good	46	53
4.	Fairly good	24	33
5.	Fairly	1	1
6.	Poor	0	2
7.	Very poor	0	0

**Table 2.** Percentage of Criteria for Motivation and Interest Variables

No	Criteria	Variable Percentage (%)	
		Motivation	Interest
1.	Extremely	2	0
2.	Very high	12	6
3.	High	27	21
4.	Fairly high	57	56
5.	Low	3	14
6.	Very low	0	3
7.	Extremely low	0	0

Based on the two tables above, it can be seen that the majority of respondents' perceptions are in the good category reaching 46%, the majority of respondents' motivation is in the fairly high category reaching 57%, the majority of respondents' rank is in the good category reaching 53%, and the majority of respondents' interest is in the fairly high category reaching 56%.

Furthermore, the data collected was tested for normality, homogeneity, and linearity as a prerequisite test for analysis. The normality test was carried out by using the Kolmogorav-Smirnov test. The significance value (2-tailed) was 0.377 on the perception and motivation

variables towards rank, the significance value (2-tailed) was 0.058 on the perception, motivation and rank variables towards interest. The significance value (2-tailed) in both tests was more than 0.05, so it was concluded that the data were normally distributed.

The homogeneity test was carried out with the Spearman Rho test between the perception and motivation variables on the rank. The significance value (2-tailed) for the perception variable was 0.202, the significance value (2-tailed) for the motivation variable was 0.124. The results of the Spearman Rho test between the variables of perception, motivation and rank on interest obtained a significance value (2-tailed) for the perception variable of 0.981, the significance value (2-tailed) of the motivation variable was 0.632 and the significance value (2-tailed) of the rank variable was 0.654. the significance value (2-tailed) of all variables is more than 0.05, so it can be concluded that the data is homogeneous.

The linearity test was measured through the association level of the relationship or influence between variables through the magnitude of the correlation coefficient on the VIF statistical value and the value of collinearity tolerance. the motivation variable is 0.689, which is greater than 0.10 in the perception and motivation variable test for rank, then the VIF statistic value for the perception variable is 1.510, the motivation variable is 1.800 and the rank variable is 1.567 smaller than 10 and for the value of the collinearity tolerance of the perception variable is equal to 0.662, the motivation variable is 0.555, the rank variable is 0.638, which is greater than 0.10 in the perception, motivation and rank variable test of interest, so it can be concluded that the data is linear.

The research data comes from samples that are normally distributed, homogeneous and linear, then multiple regression analysis and path analysis are performed with the help of IBM SPSS 25. Furthermore, the analyzed data will be tested for hypotheses using the research hypothesis rules in multiple regression analysis will be accepted if the significance value is

smaller. of (sig < 0.05), whereas if the calculated significance value is greater than (sig > 0.05), the hypothesis is rejected. The research hypothesis rules on path analysis will be accepted if the coefficient value of the indirect influence path is greater than the value of the direct influence path coefficient, whereas if the indirect influence path coefficient is smaller than the direct influence path coefficient, the hypothesis is rejected.

Multiple regression test results can be seen in the following table:

**Table 3.** Coefficient of Regression of Perception and Motivation to Rank

No	Variable	Standardized Coefficients Beta	Value Significance
1	Perseption	0.193	0.014
2	Motivation	0.472	0.000

Based on Table 3, it is known that the significance value of the perception variable is 0.014 and the motivation variable is 0.000 which is smaller than 0.05, so it can be concluded that the perception and motivation variables partially have a significant effect on the rank variable.

**Table 4.** Coefficient of Regression of Perception, Motivation and Rank on Interest

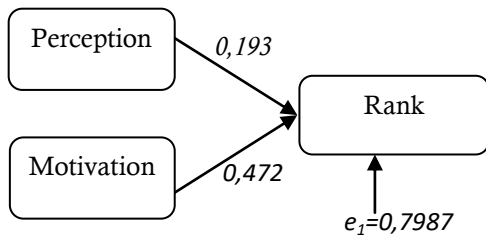
No	Variable	Standardized Coefficients Beta	Value Significance
1	Perseption	0.109	0.200
2	Motivation	0.215	0.021
3	Rank	0.299	0.001

Based on Table 4, it is known that the significance value of the perception variable is 0.200 greater than 0.05, the motivation variable is 0.021 and the rank variable is 0.001 less than 0.05, so it can be concluded that the perception variable partially has no significant effect on the interest variable and motivation and rank partially have a significant effect on the interest variable.

Based on the results of the hypothesis test, it can be seen that the better the perception and

the higher the motivation of physical education, sports and health teachers towards the publication of books in the field of education, the better their rank in the publication of books in the field of education. The other side that can be seen is that the better the perception of teachers of physical education, sports and health towards the publication of books in the field of education, the interest in the publication of books in the field of education will not be higher, while the higher and better the rank of teachers of physical education in sports and health towards book publications in the field of education, so tehe teachers interest in the publication of books in the field of education will be higher. The results of hypothesis testing in this study are able to provide different variations of research results when compared to several previous studies. Previous research conducted by Dayshandi, Handayani, & Yaningwati (2015), Satrio & Adiarsi (2019), and Fajarsari (2020) with the same variables but with different themes showed that perception and motivation had a significant effect on interest. The existence of variable equations with different themes will have a different influence on the results of the research. Meanwhile, the existence of a rank variable as a mediating variable is able to enrich the previous research model. Perception and motivation not only affect interest, but also influence rank as a mediating variable, while interest variable is not only influenced by perception and motivation but rank as a mediating variable also has a significant effect on interest in publishing of book in the field of education.

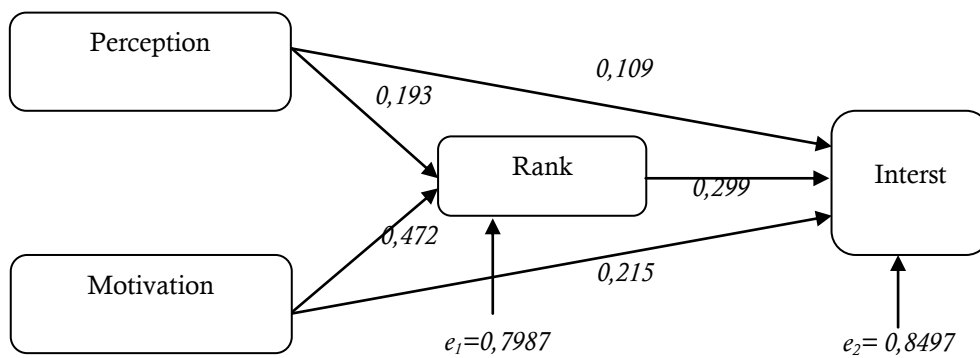
Based on Table 3, it is known that the Standardized Coefficient Beta value for the perception variable is 0.193 and the motivation variable is 0.472. The R Square value obtained from the perception and motivation regression analysis of the rank is 0.362, so it can be seen that the value of  $e_1$  is 0.7987. The path diagram of the first structural model on the regression equation of perception and motivation to rank is presented as follows:



**Figure 1.** Path diagram of the first structure model

perception variable is 0.109, the motivation variable is 0.215 and the rank variable is 0.299, the R Square value obtained from the regression analysis of perception, motivation and rank on the interest is 0.278, so it can be seen the value of  $e_2$  of 0.8497. The path diagram of the second structure model in the regression equation of perception, motivation and rank on interest is presented as follows:

Based on Table 4, it is known that the Standardized Coefficient Beta value for the



**Figure 2.** Path diagram of the second structure model

The summary of path analysis and path coefficient values in the study is presented in the following table:

**Table 5.** Summary of Path Coefficient Values

No	Variable Effect	Causal Influence		Total
		Direct	Through Rank	
1	Perception towards Rank	0.193	-	0.193
2	Perception towards Interest	0.109	0.058	0.167
3	Motivation towards Rank	0.472	-	0.472
4	Motivation towards Interest	0.215	0.141	0.356
5	Rank towards Interest	0.299	-	0.299

Based on Table 5, it is known that the path coefficient value of the indirect influence of perception on interest through rank is smaller than the direct effect of perception on interest, so it can be concluded that the mediation of rank has no significant effect on the effect of perception on interest. On the partial effect of perception on interest in book publication in the

field of education, it was found that perception partially had no significant effect on interest in book publication in education, although rank as a mediating variable had a significant effect on interest in book publication in education. The results of this study are able to enrich previous research conducted by Dayshandi, Handayani, & Yaningwati (2015), Satrio & Adiarsi (2019),

and Fajarsari (2020) with the same variable but in a different theme that perception has a significant effect on interest. In this study, the insignificant effect of perception on interest in publishing books in the field of education was constant even though there was mediation of rank. The real results presented in this study are that the relationship of the partial effect of perception on interest in publishing books in the field of education will not change positively and significantly with the mediation of rank which has a positive and significant effect on interest in book publication in education. The mediating role of rank in this study has not been significant and has not been able to provide a significant positive indirect influence between the perception variable as the independent variable and interest as the dependent variable.

Based on Table 5, it is known that the path coefficient value of the indirect influence of motivation on interest through rank is smaller than the direct effect of motivation on interest, so it can be concluded that the mediation of rank also has no significant effect on the influence of motivation on interest. On the influence of motivation and rank as mediating variables partially on interest in publishing books in the field of education, it was found that these two variables had an effect on interest in publishing books in education, so this research was able to support and enrich the types of previous research conducted by Dayshandi, Handayani, & Yaningwati (2015), Satrio & Adiarsi (2019), and Fajarsari (2020) with the same variable but with a different theme with the result that motivation has a significant effect on interest. The existence of rank as a mediating variable in this study is able to present a variety of research models that are different from previous studies, but the mediating role of rank in this study is not significant. It is proven that the relationship of the influence of motivation partially on interest in book publication in the field of education will not change positively and significantly with the mediation of rank which has a positive and significant effect on interest in publication of books in the field of education. The existence of mediation of rank actually gives an insignificant

effect on the indirect effect of motivation on interest in publishing books in the field of education.

## CONCLUSION

The conclusion is based on the results of research on Elementary School Physical Education, Sports and Health Teachers in Sukoharjo Regency that there is no positive and significant influence on perception and motivation partially on interest in publishing books in the field of education through rank. These results conclude that the mediation of rank on the influence of perception and motivation partially on interest in publishing books in the field of education has not had a significant effect. Based on this, it can be said that the theoretical implication in this research is the need for regulations from relevant agencies that support the implementation of scientific publications by publishing books in the field of education in sustainable professional development activities by taking into account various internal factors from teachers. In addition, psychological factors, perceptions and motivations for the publication of books in the field of education and the condition of the rank of teachers need to be improved to be able to increase teacher professionalism through continuous professional development activities.

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